

2022

HARVEST TRIAL DATA



YieldMaster[™]
SOLUTIONS^{LLC}

PO BOX 198 | DE SMET, SD 57231 | 605-860-8534 | YIELDMASTERSOLUTIONS.COM

LEADING THE WAY IN YIELD ENHANCING SOLUTIONS

YieldMaster Solutions (YMS) is pleased to offer dealers and growers performance enhancing biological technologies, innovations to improve crop health and increase yield potential. Solutions include products from some of the most innovative biological suppliers in the industry: Azotic North America, Agrovive, EGE, Low Mu Tech, Asido, and MycoGold. We offer a robust product portfolio for multiple crop types to meet specific operation and application needs including: seed coat, foliar, and in-furrow applications.



YieldMaster[™]
SOLUTIONS^{LLC}

PO BOX 198 | DE SMET, SD 57231 | 605-860-8534
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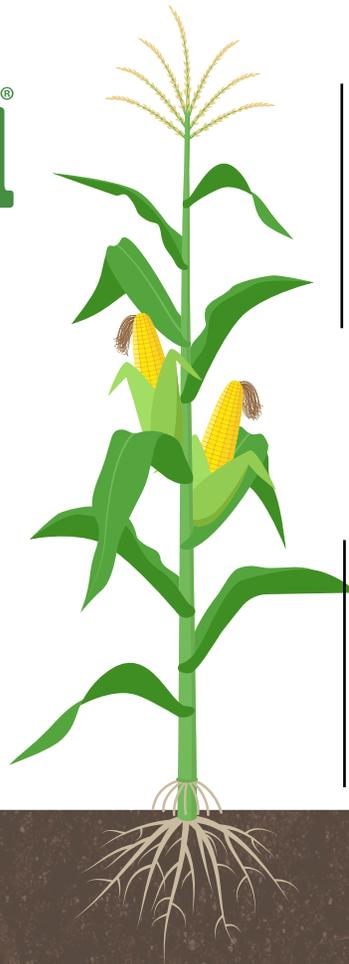
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CORN





SEASON-LONG MODE OF ACTION

Bacteria create vesicles within the cells which capture atmospheric nitrogen providing season-long nitrogen nourishment.

TRANSLOCATES & REPLICATES

In-furrow application allows Envita bacteria to enter through the root zone where it translocates and replicates throughout the plant. The bacteria begin colonizing and capturing atmospheric nitrogen.

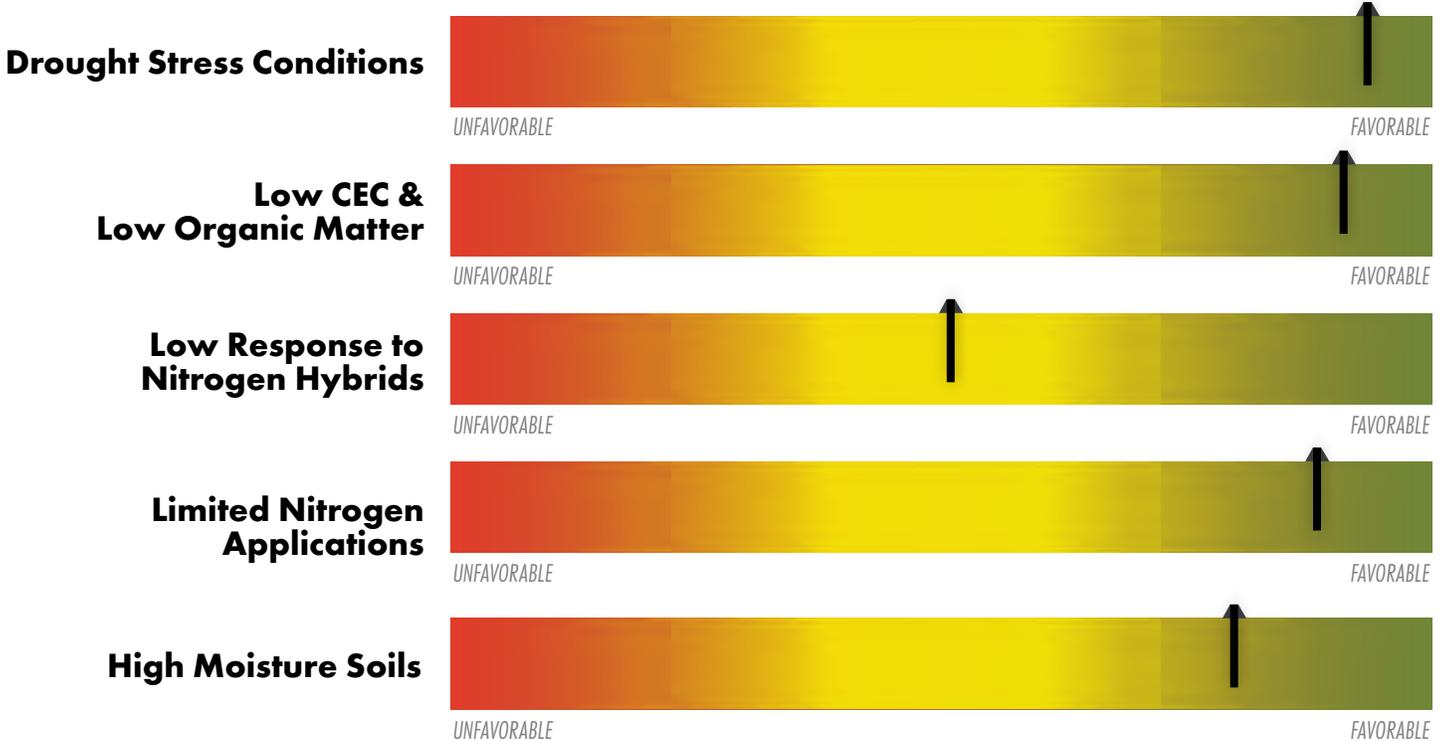
BACTERIA ARE QUICK TO COLONIZE

With foliar application, Envita enters through the leaf stomata and into the plant cells. From there, the bacteria quickly begin to colonize and translocate throughout the plant.

WEATHERPROOF NITROGEN

When nitrogen is lost to the environment through leaching, denitrification, volatility, or is simply not accessible due to drought conditions, Envita is there to deliver nitrogen where and when it's needed all season long.

Acre MATCHMAKER



2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

ANTHON, IA
LOCATION

CORN
CROP TYPE

P0953
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 5, 2022
PLANTED

OCT. 19, 2022
HARVESTED

envita[®]

-vs-

CONTROL

15.4%

TREATED MOISTURE

-vs-

16.2%

TREATED MOISTURE

62.0

TEST WEIGHT

-vs-

60.0

TEST WEIGHT

268.1

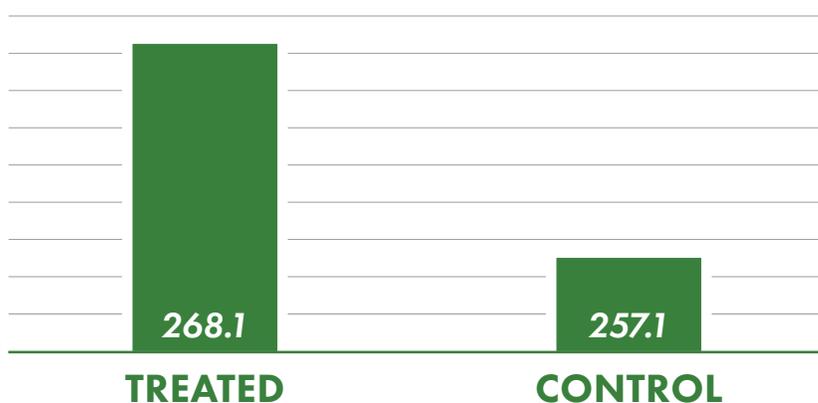
TREATED BU/ACRE

-vs-

257.1

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 21, 2022
HARVESTED

envita[®]

-vs-

CONTROL

25.0%

TREATED MOISTURE

-vs-

24.5%

TREATED MOISTURE

54.0

TEST WEIGHT

-vs-

53.5

TEST WEIGHT

167.4

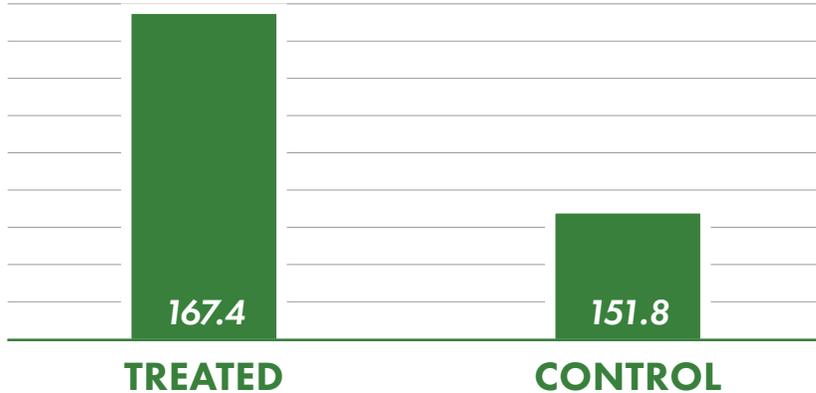
TREATED BU/ACRE

-vs-

151.8

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CANNON FALLS, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 31, 2022
HARVESTED

envita[®]

-vs-

CONTROL

17.3%

TREATED MOISTURE

-vs-

17.4%

TREATED MOISTURE

56.0

TEST WEIGHT

-vs-

60.0

TEST WEIGHT

240.2

TREATED BU/ACRE

-vs-

235.2

CONTROL BU/ACRE

BU/ACRE



5.0
BU/ACRE

ADVANTAGE

Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CLARKSVILLE, IA
LOCATION

CORN
CROP TYPE

WYFFELS 5086
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 13, 2022
PLANTED

OCT. 7, 2022
HARVESTED

envita[®]

-VS-

CONTROL

20.6%

TREATED MOISTURE

-VS-

19.8%

TREATED MOISTURE

227.2

TREATED BU/ACRE

-VS-

221.8

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CROOKSTON, MN
LOCATION

CORN
CROP TYPE

LR 9181 VIP3110A
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 18, 2022
HARVESTED

envita[®]

-VS-

CONTROL

18.9%

TREATED MOISTURE

-VS-

18.7%

TREATED MOISTURE

55.9

TEST WEIGHT

-VS-

56.1

TEST WEIGHT

171.3

TREATED BU/ACRE

-VS-

164.1

CONTROL BU/ACRE

BU/ACRE



7.2

BU/ACRE

ADVANTAGE

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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

ELLSWORTH, WI
LOCATION

CORN
CROP TYPE

7
HYBRIDS
TESTED

FOLIAR
APPLICATION METHOD

MAY 22, 2022
PLANTED

OCT. 17, 2022
HARVESTED

envita[®]

-VS-

CONTROL

13.3%

TREATED MOISTURE

-VS-

13.3%

TREATED MOISTURE

192.9

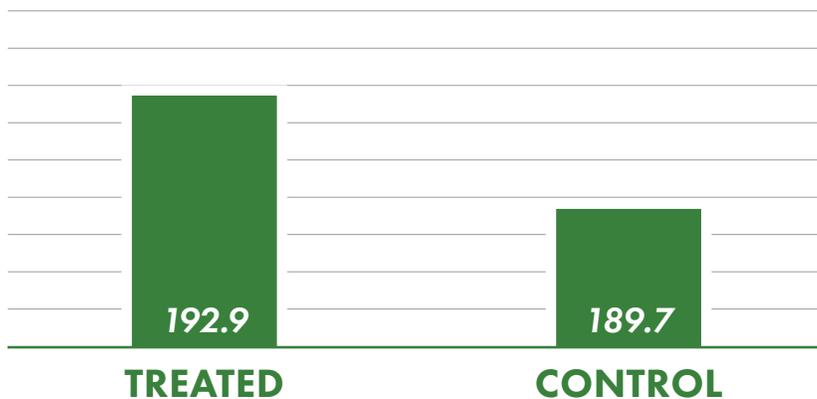
TREATED BU/ACRE

-VS-

189.7

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FERGUS FALLS, MN
LOCATION

CORN
CROP TYPE

THUNDER T6996 VT2P
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 16, 2022
PLANTED

OCT. 11, 2022
HARVESTED

envita[®]

-vs-

CONTROL

17.6%

TREATED MOISTURE

-vs-

17.7%

TREATED MOISTURE

57.1

TEST WEIGHT

-vs-

57.0

TEST WEIGHT

230.1

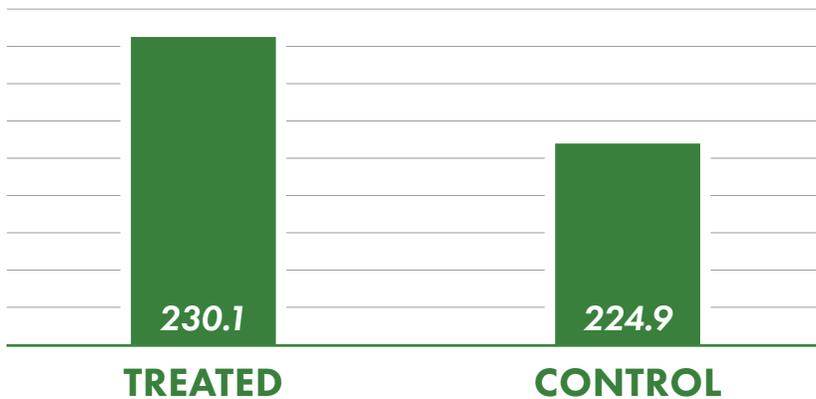
TREATED BU/ACRE

-vs-

224.9

CONTROL BU/ACRE

BU/ACRE



5.2
BU/ACRE

ADVANTAGE

Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FOXHOME, MN
LOCATION

CORN
CROP TYPE

THUNDER T6888 VT2P
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 19, 2022
HARVESTED

envita[®]

-vs-

CONTROL

15.2%

TREATED MOISTURE

-vs-

15.0%

TREATED MOISTURE

58.0

TEST WEIGHT

-vs-

59.0

TEST WEIGHT

154.3

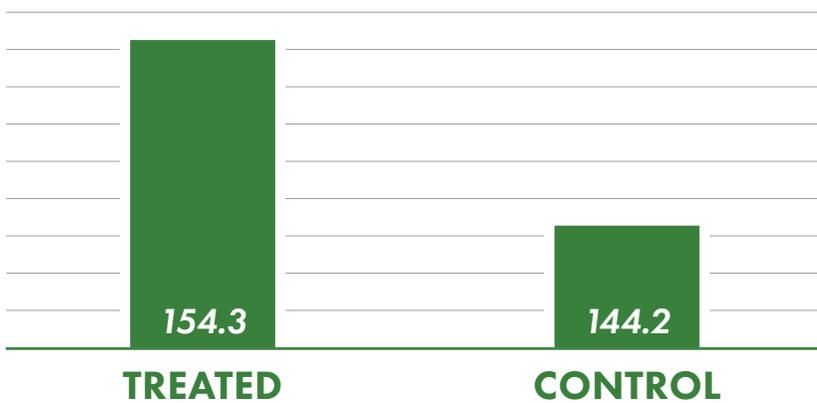
TREATED BU/ACRE

-vs-

144.2

CONTROL BU/ACRE

BU/ACRE



10.1
BU/ACRE
ADVANTAGE

Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HARVEY, ND
LOCATION

CORN
CROP TYPE

LR 9181 VIP3220A
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 14, 2022
HARVESTED

envita[®]

-vs-

CONTROL

19.0%

TREATED MOISTURE

-vs-

19.7%

TREATED MOISTURE

166.8

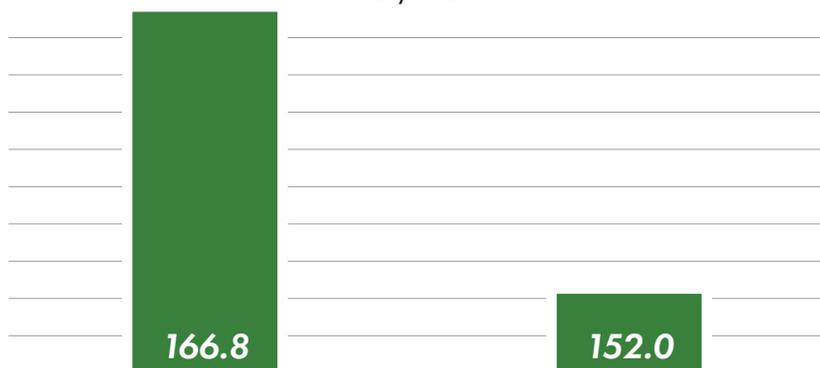
TREATED BU/ACRE

-vs-

152.0

CONTROL BU/ACRE

BU/ACRE



TREATED

CONTROL

14.8

BU/ACRE

ADVANTAGE

Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HENRY, SD
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 18, 2022
PLANTED

OCT. 23, 2022
HARVESTED

envita[®]

-vs-

CONTROL

13.8%

TREATED MOISTURE

-vs-

13.3%

TREATED MOISTURE

59.0

TEST WEIGHT

-vs-

59.0

TEST WEIGHT

241.1

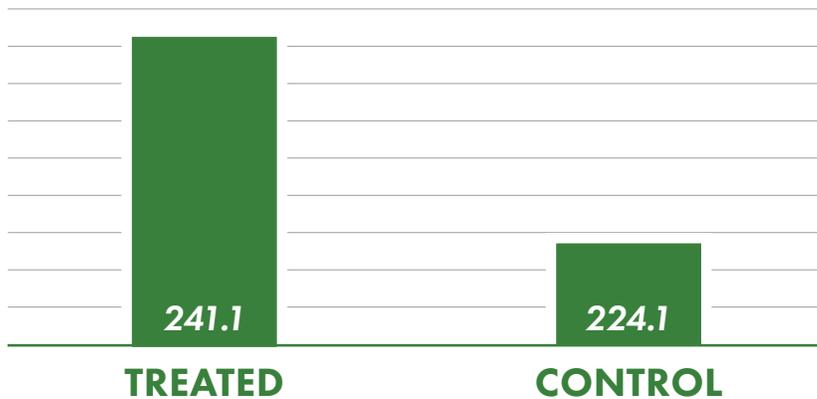
TREATED BU/ACRE

-vs-

224.1

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HOFFMAN, MN
LOCATION

CORN
CROP TYPE

P9492AM
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 13, 2022
HARVESTED

envita[®]

-vs-

CONTROL

18.3%

TREATED MOISTURE

-vs-

18.8%

TREATED MOISTURE

57.0

TEST WEIGHT

-vs-

57.0

TEST WEIGHT

237.8

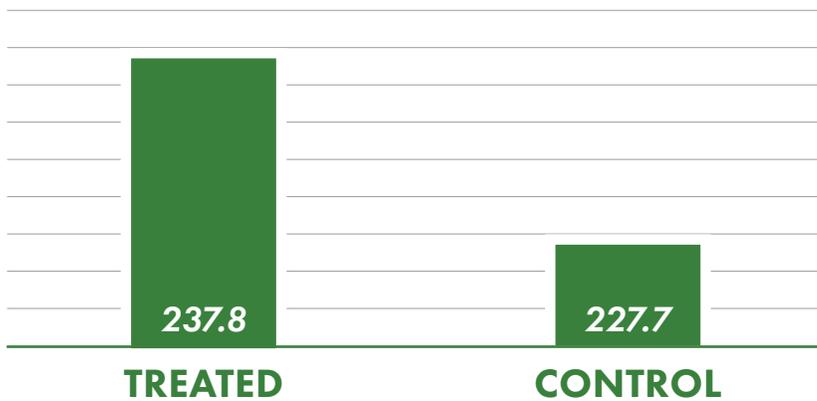
TREATED BU/ACRE

-vs-

227.7

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LAKE PRESTON, SD
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 16, 2022
PLANTED

OCT. 4, 2022
HARVESTED

envita[®]

-vs-

CONTROL

16.1%

TREATED MOISTURE

-vs-

15.5%

TREATED MOISTURE

56.5

TEST WEIGHT

-vs-

56.8

TEST WEIGHT

224.0

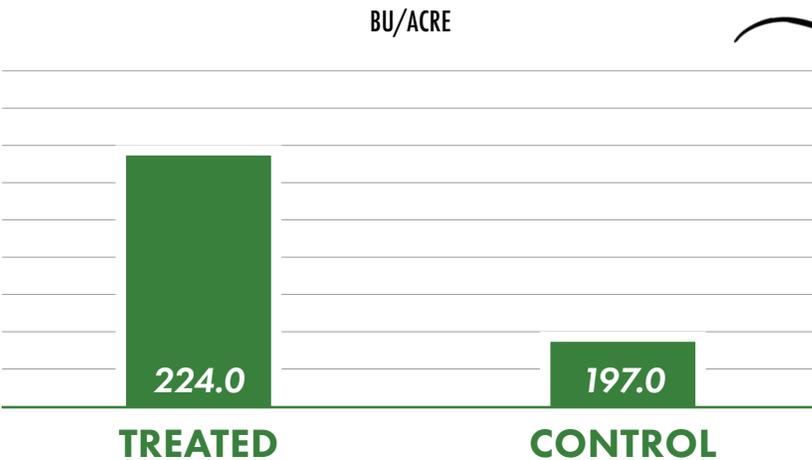
TREATED BU/ACRE

-vs-

197.0

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LITCHFIELD, MN
LOCATION

CORN
CROP TYPE

LR 9199 VIP3110
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 16, 2022
PLANTED

OCT. 26, 2022
HARVESTED

envita[®]

-vs-

CONTROL

17.4%

TREATED MOISTURE

-vs-

17.1%

TREATED MOISTURE

52.1

TEST WEIGHT

-vs-

55.3

TEST WEIGHT

182.4

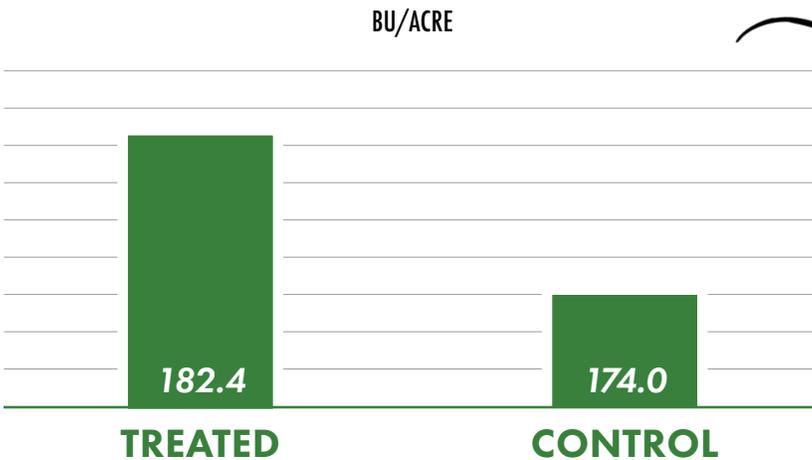
TREATED BU/ACRE

-vs-

174.0

CONTROL BU/ACRE

BU/ACRE



8.4
BU/ACRE

ADVANTAGE

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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 10, 2022
PLANTED

OCT. 11, 2022
HARVESTED

envita[®]

-VS-

CONTROL

16.0%

TREATED MOISTURE

-VS-

15.4%

TREATED MOISTURE

252.1

TREATED BU/ACRE

-VS-

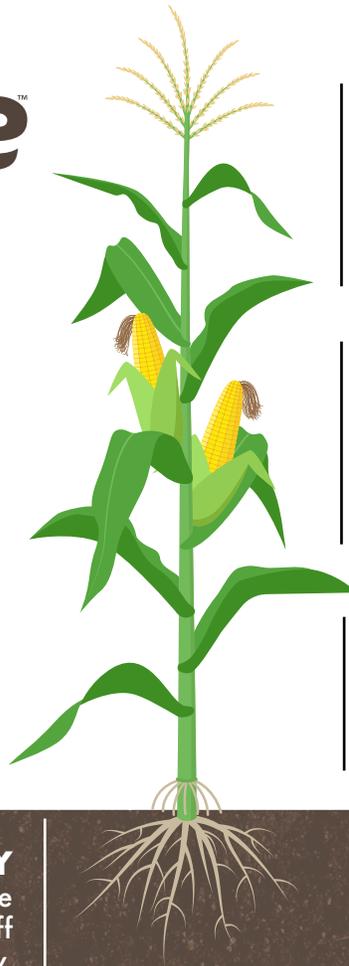
244.3

CONTROL BU/ACRE

BU/ACRE



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INCREASE IN P & K AVAILABILITY

Nutriquire contains spore forming microbes that improve phosphorus and potassium availability through the creation of organic and inorganic acids. These organic and inorganic acids alter the pH locally allowing for the release of more phosphorus and potassium.

EASY TO APPLY

With a wide range of application methods, Nutriquire can be applied in-furrow, foliar, side dressed, or fertigated for easy incorporation into any operation.

IMPROVED NUTRIENT UPTAKE

Overall plant nutrient efficiency, availability, and uptake is improved through the microbes found in Nutriquire as they aid in breaking soil bonds that typically make nutrients unavailable.

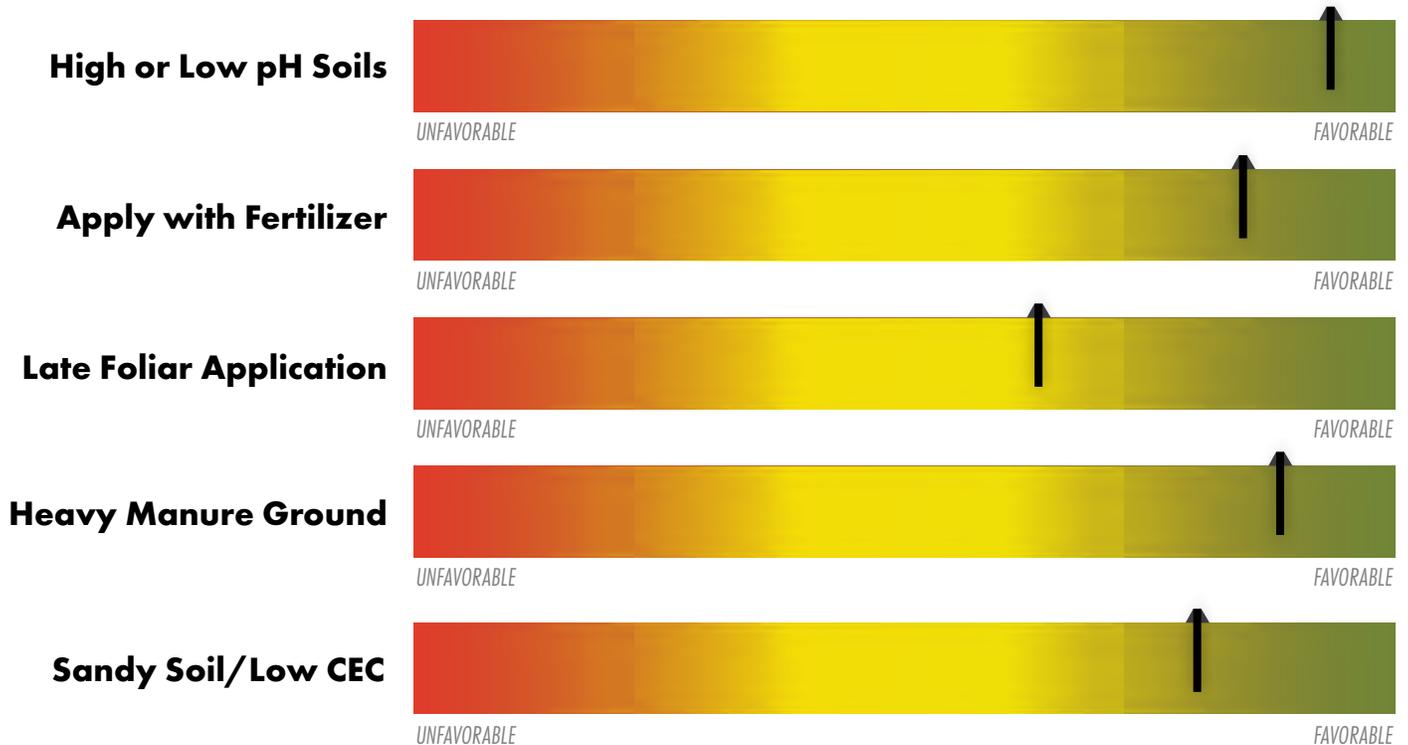
VERSATILITY

Nutriquire contains spore forming bacteria, meaning they are dormant, allowing for longer shelf life and versatility of application methods.

NITROGEN AVAILABILITY

Nutriquire converts soil N to plant available forms quicker allowing for less nutrient run off and improved plant availability.

Acre MATCHMAKER





CORN

2022 Data Results

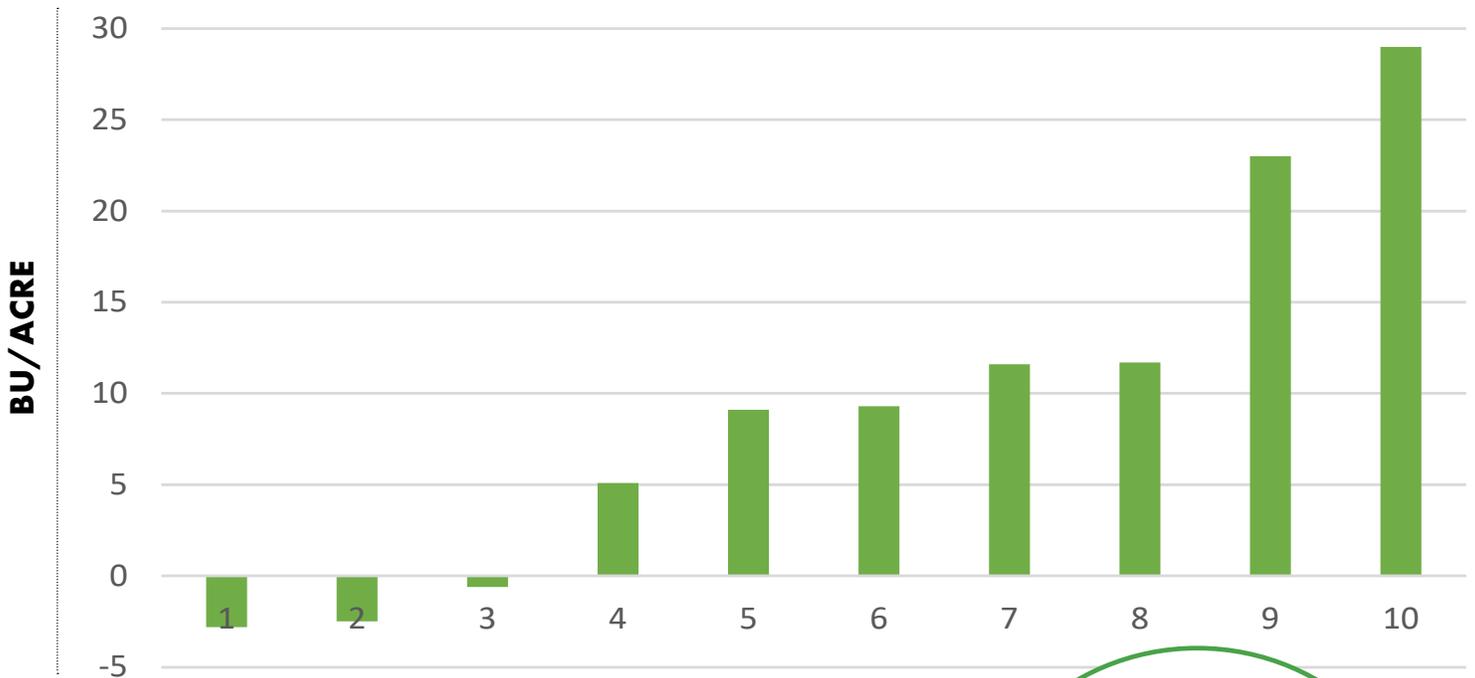
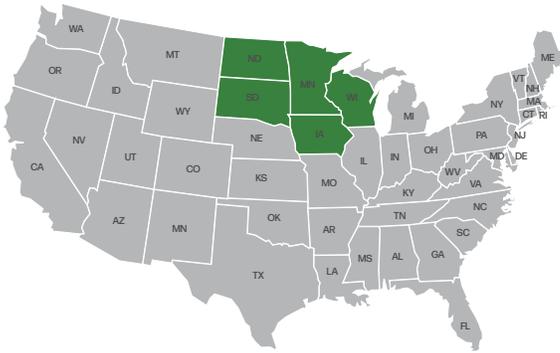
10
DATA POINTS

70%
POSITIVE RESPONSE

5
STATES

9.3 BU/ACRE
AVERAGE INCREASE

10
LOCATIONS



COMMENTS

Nutriquire had a strong showing in its first year in the Proof of Concept plots. With 10 locations scattered across 5 states, Nutriquire displayed its ability to perform in a wide array of soil conditions. The largest wins were found where you would expect them, heavy manure ground and soil with above or below average pH.

14.1

BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

ANTHON, IA
LOCATION

CORN
CROP TYPE

P0953
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 5, 2022
PLANTED

OCT. 19, 2022
HARVESTED

Nutriquire

-vs-

CONTROL

16.4%

TREATED MOISTURE

-vs-

16.2%

TREATED MOISTURE

60.7

TEST WEIGHT

-vs-

60.0

TEST WEIGHT

266.4

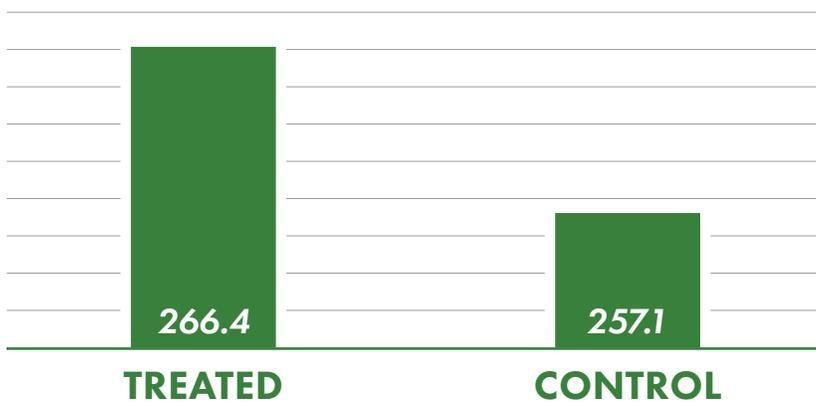
TREATED BU/ACRE

-vs-

257.1

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 21, 2022
HARVESTED

Nutriquire


-vs-

CONTROL

24.9%

TREATED MOISTURE

-vs-

24.5%

TREATED MOISTURE

54.1

TEST WEIGHT

-vs-

53.5

TEST WEIGHT

156.9

TREATED BU/ACRE

-vs-

151.8

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CROOKSTON, MN
LOCATION

CORN
CROP TYPE

LR 9181 VIP3110A
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 18, 2022
HARVESTED

Nutriquire[™]

-VS-

CONTROL

18.6%
TREATED MOISTURE

-VS-

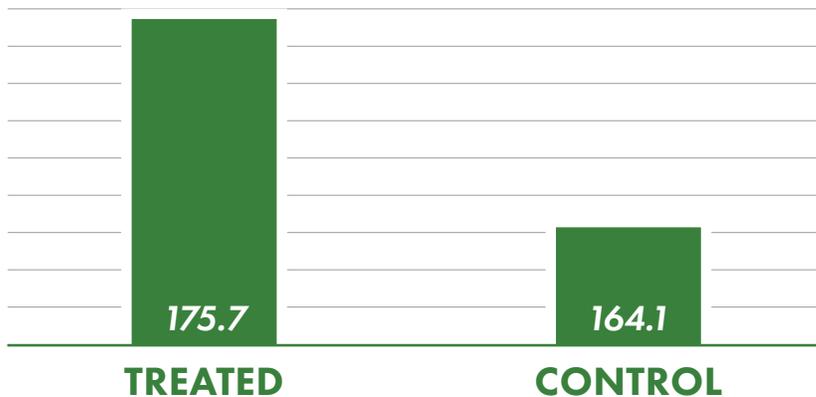
18.7%
TREATED MOISTURE

175.7
TREATED BU/ACRE

-VS-

164.1
CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HARVEY, ND
LOCATION

CORN
CROP TYPE

LR 9181 VIP3110A
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 14, 2022
HARVESTED

Nutriquire[™]

-VS-

CONTROL

19.2%

TREATED MOISTURE

-VS-

19.7%

TREATED MOISTURE

163.7

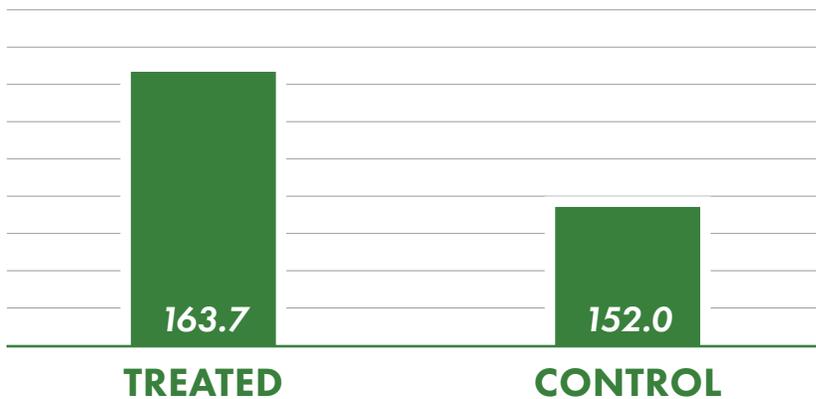
TREATED BU/ACRE

-VS-

152.0

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LAKE PRESTON, SD
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 16, 2022
PLANTED

OCT. 4, 2022
HARVESTED

Nutriquire

-vs-

CONTROL

17.8%

TREATED MOISTURE

-vs-

15.5%

TREATED MOISTURE

55.7

TEST WEIGHT

-vs-

56.8

TEST WEIGHT

226.0

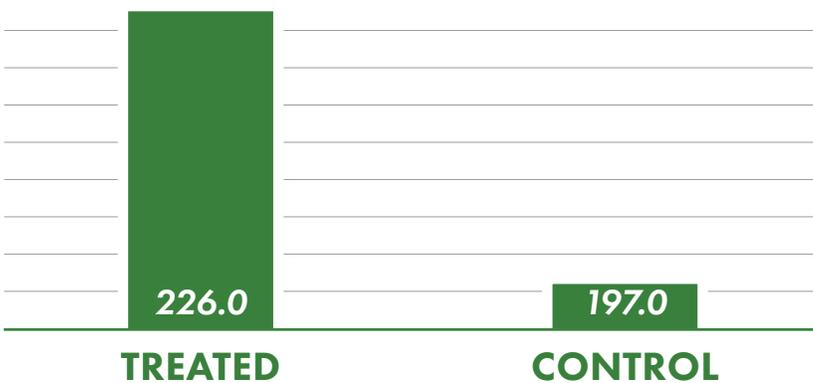
TREATED BU/ACRE

-vs-

197.0

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 10, 2022
PLANTED

OCT. 11, 2022
HARVESTED

Nutriquire[™]

-VS-

CONTROL

14.8%

TREATED MOISTURE

-VS-

15.2%

TREATED MOISTURE

262.7

TREATED BU/ACRE

-VS-

244.3

CONTROL BU/ACRE

BU/ACRE



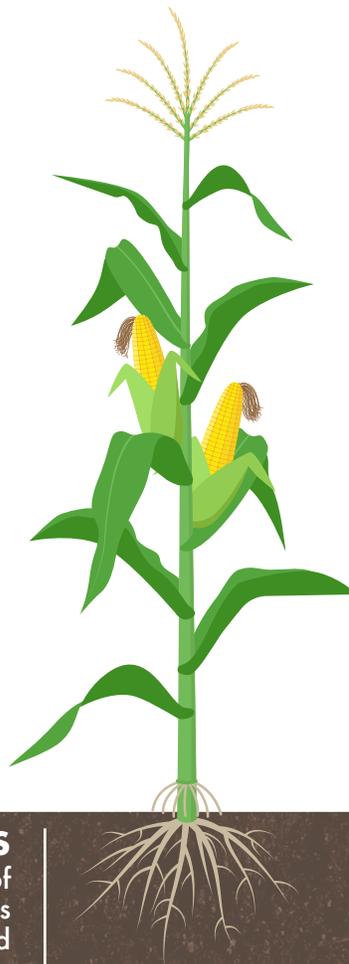
18.4

BU/ACRE

ADVANTAGE

Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

ION_{fx}™



HEAT & DROUGHT STRESS TOLERANCE

ION_{fx} bacteria modulate the pH within the plant which helps keep the internal temperature cooler throughout the course of the day. This mechanism allows the plant to operate longer throughout the day.

ROOT DEVELOPMENT

Enhanced root system allowing for more efficient nutrient & water uptake.

SECONDARY BRACE ROOTS

ION_{fx} encourages the development of secondary brace roots. This attribute provides increased access to water and soil nutrition and improves standability.

INCREASED EAR SIZE & IMPROVED EAR FILL

Bacteria within ION_{fx} will promote plant growth regulators that allow the plant to set a larger ear at the V5 stage.

PLANT GROWTH REGULATOR RESPONSE

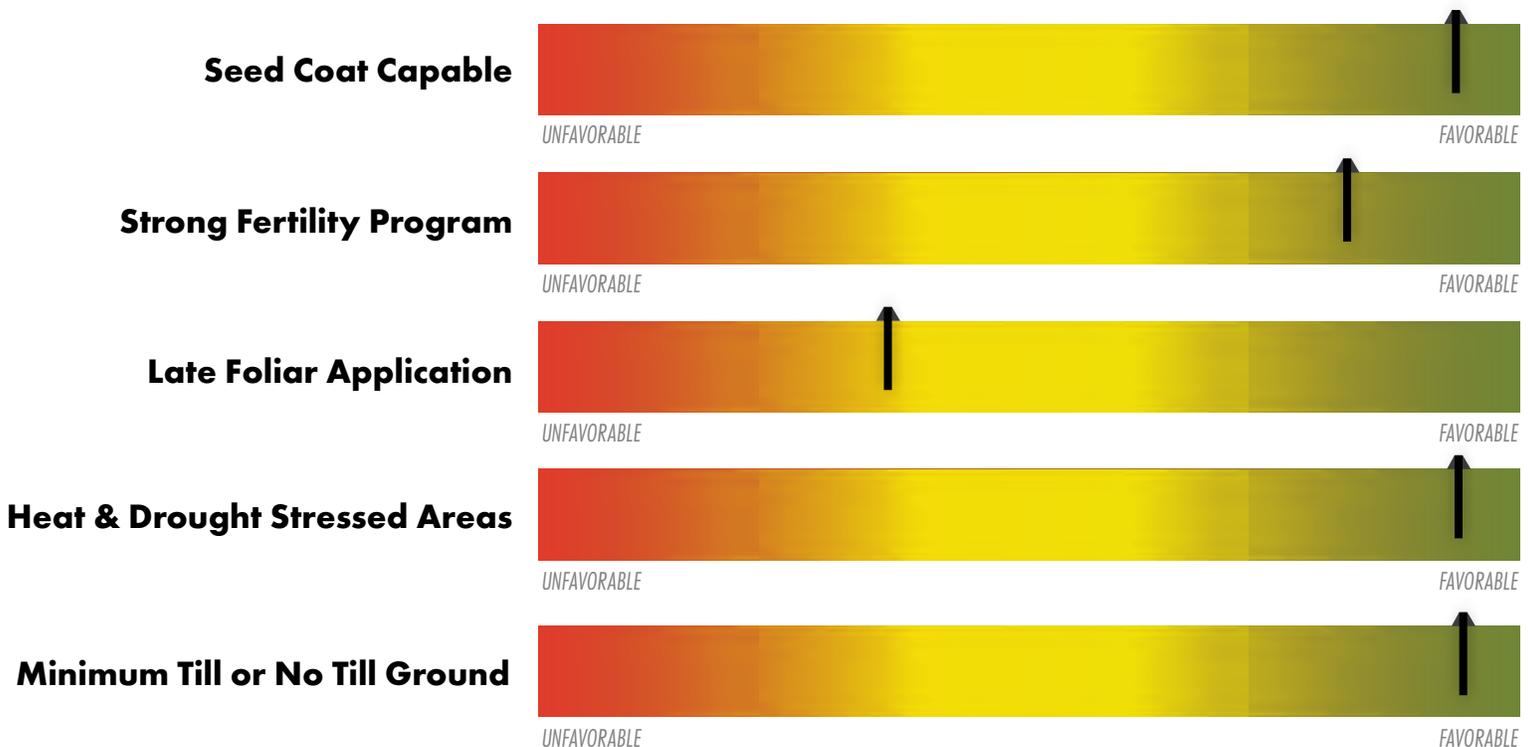
Bacteria found in ION_{fx} stimulate and create:

- Cell division
- Thicker stalks
- Larger leaves
- Larger ear set

RESIDUE MANAGEMENT

ION_{fx} bacteria accelerate digestion and softening of plant tissue post harvest for improved residue management and potential nutrient availability.

Acre MATCHMAKER





ION_{fx} 2022 Data Results

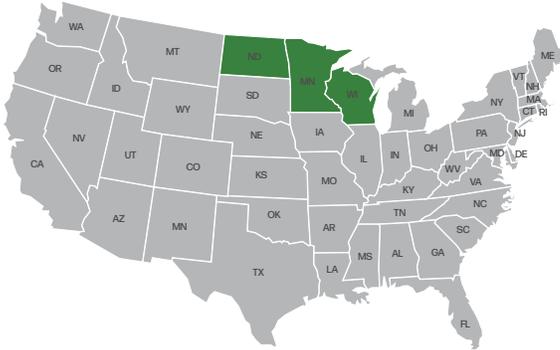
8
DATA POINTS

87.5%
POSITIVE RESPONSE

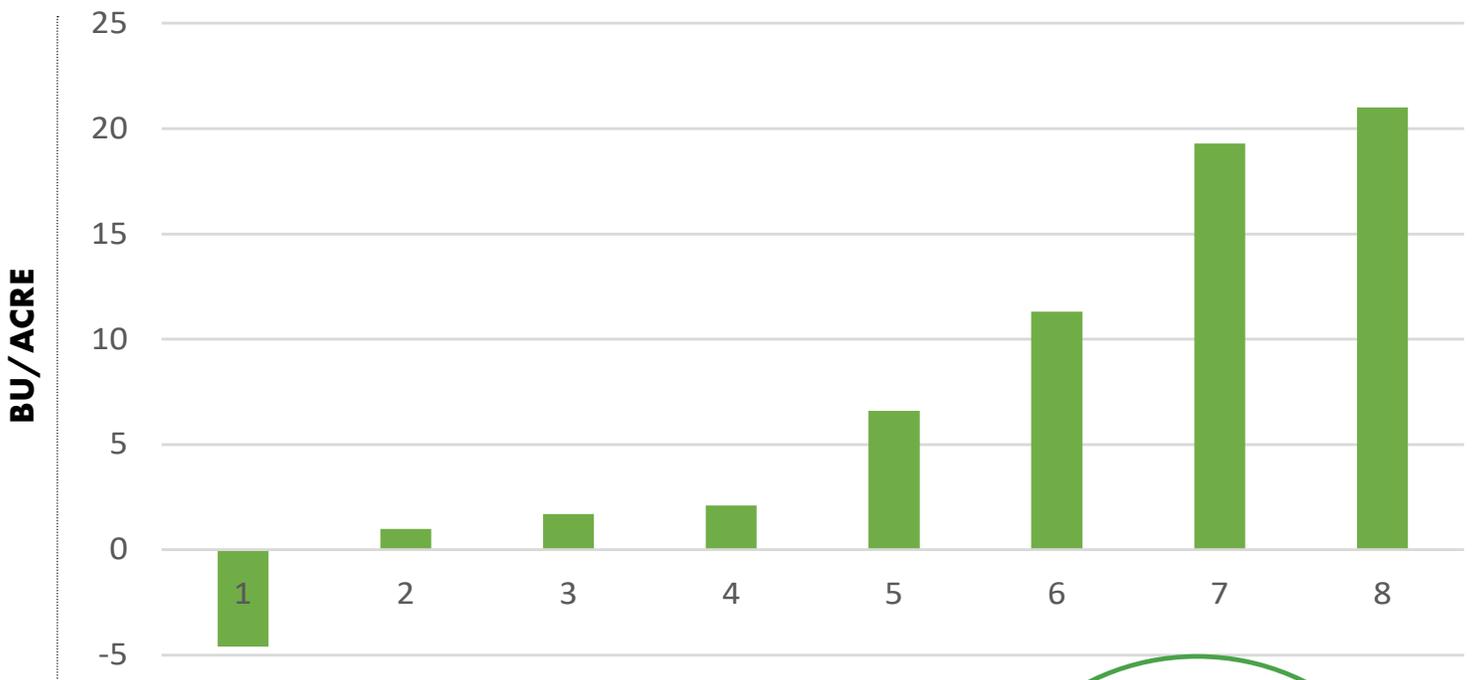
3
STATES

7.3 BU/ACRE
AVERAGE INCREASE

8
LOCATIONS



ION_{fx}™



COMMENTS

Ion_{fx} had an exceptional year in 2022. This was in part due to the abundance of heat and drought stress across many of our trial locations. The ability of Ion_{fx} to help plants overcome many of the abiotic stresses endured during difficult years was on full display this year.

9.0

BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**



ION_{fx}

Multi-Year Data Results

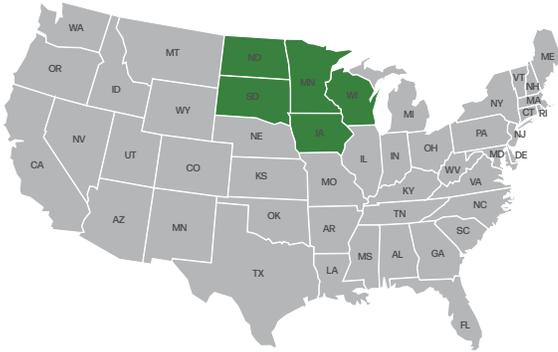
67
DATA POINTS

70%
POSITIVE RESPONSE

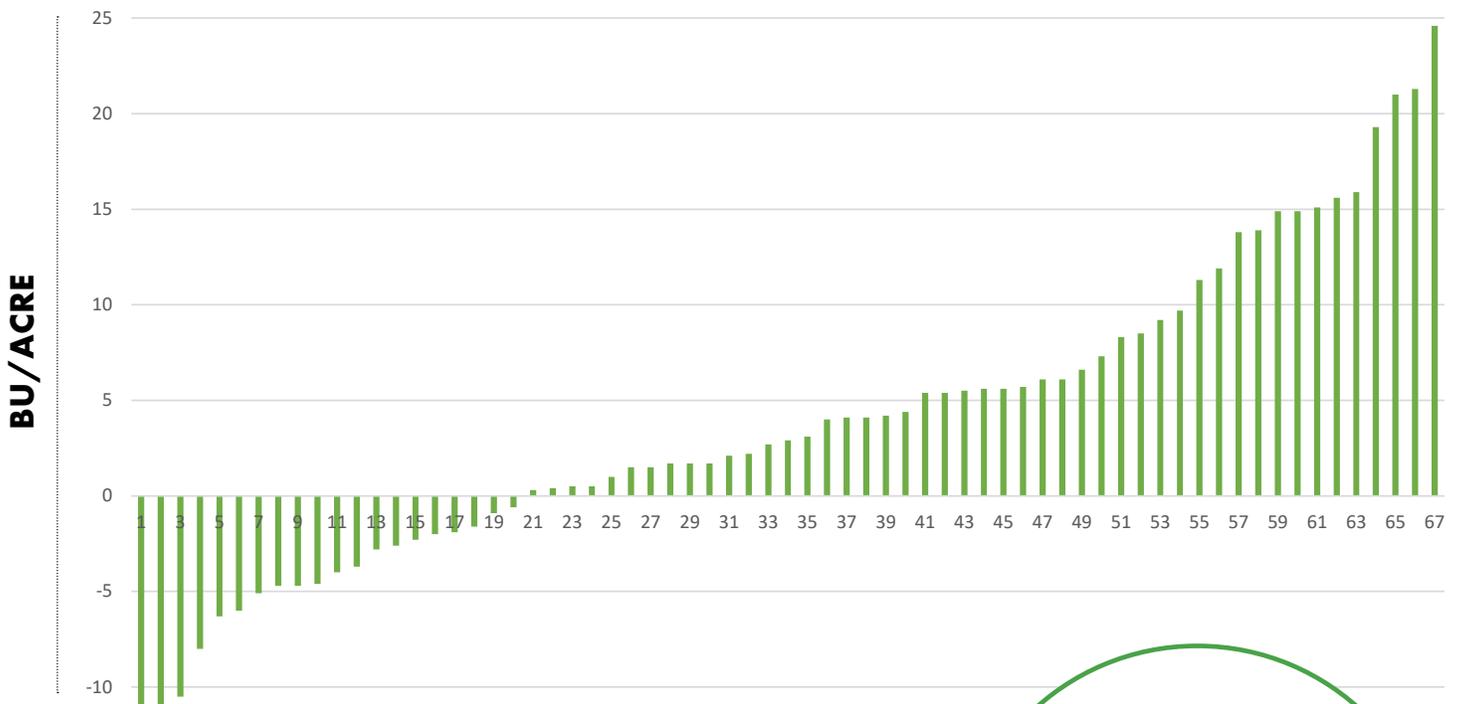
5
STATES

3.9 BU/ACRE
AVERAGE INCREASE

27
LOCATIONS



ION_{fx}™



COMMENTS

Ion_{fx} continues to provide solid win rates with high ROI when positive. One thing that continues to hold true is that this product shines in stressful conditions. Heat and drought stress tolerance has been a highlight for the past 2 years.

7.5

BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 21, 2022
HARVESTED

ION_{fx}TM

-vs-

CONTROL

23.6%

TREATED MOISTURE

-vs-

24.5%

TREATED MOISTURE

53.0

TEST WEIGHT

-vs-

53.5

TEST WEIGHT

158.4

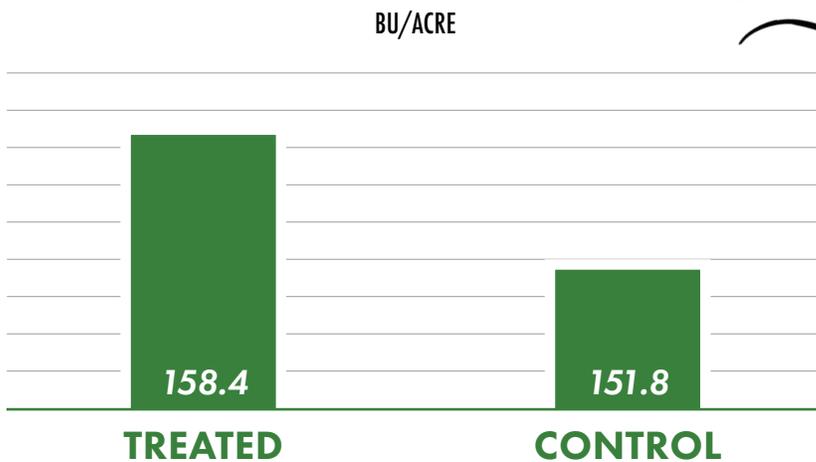
TREATED BU/ACRE

-vs-

151.8

CONTROL BU/ACRE

BU/ACRE



ION_{fx}TM is a mix of genetically identified and patented bacteria, along with archaea and fungi. While many microbes live naturally in a plant, this mix of microorganisms has been selected to support, enhance, or supplement plant functions. ION_{fx}TM unlocks a plants ability to produce growth regulators and metabolites.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CANNON FALLS, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 31, 2022
HARVESTED

ION_{fx}TM

-vs-

CONTROL

16.7%

TREATED MOISTURE

-vs-

17.4%

TREATED MOISTURE

60.2

TEST WEIGHT

-vs-

60.0

TEST WEIGHT

256.2

TREATED BU/ACRE

-vs-

235.2

CONTROL BU/ACRE

BU/ACRE



21.0

BU/ACRE

ADVANTAGE

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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CROOKSTON, MN
LOCATION

CORN
CROP TYPE

LR 9181 3110A
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 18, 2022
HARVESTED

ION*fx*TM

-VS-

CONTROL

18.6%

TREATED MOISTURE

-VS-

18.7%

TREATED MOISTURE

183.4

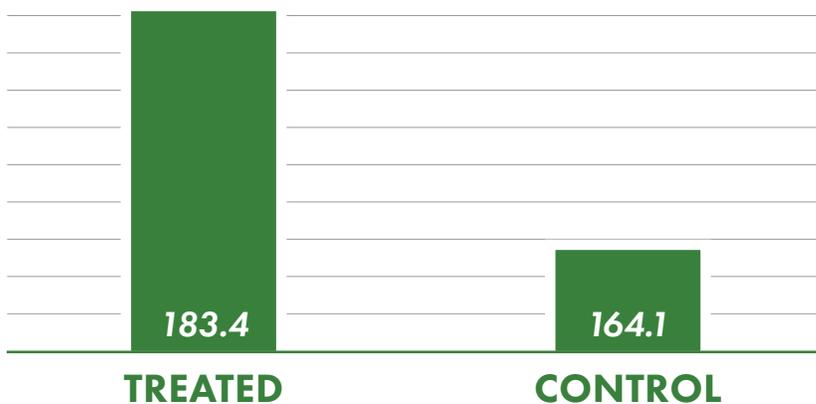
TREATED BU/ACRE

-VS-

164.1

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FAIRFAX, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 25, 2022
PLANTED

OCT. 21, 2022
HARVESTED

ION*fx*TM

-vs-

CONTROL

15.0%

TREATED MOISTURE

-vs-

14.5%

TREATED MOISTURE

182.4

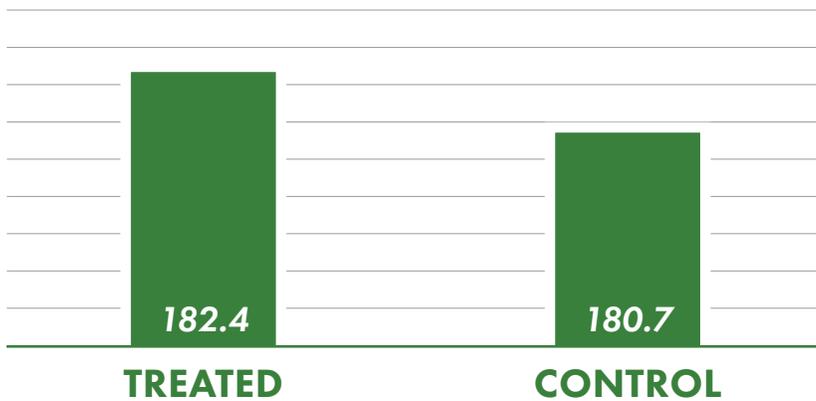
TREATED BU/ACRE

-vs-

180.7

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HARVEY, ND
LOCATION

CORN
CROP TYPE

LR 9181 VIP3110A
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 14, 2022
HARVESTED

ION_{fx}TM

-vs-

CONTROL

19.3%
TREATED MOISTURE

-vs-

19.7%
TREATED MOISTURE

153.0
TREATED BU/ACRE

-vs-

152.0
CONTROL BU/ACRE

BU/ACRE



IONfxTM is a mix of genetically identified and patented bacteria, along with archaea and fungi. While many microbes live naturally in a plant, this mix of microorganisms has been selected to support, enhance, or supplement plant functions. IONfxTM unlocks a plants ability to produce growth regulators and metabolites.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 10, 2022
PLANTED

OCT. 11, 2022
HARVESTED

ION_{fx}TM

-VS-

CONTROL

17.8%

TREATED MOISTURE

-VS-

15.2%

TREATED MOISTURE

255.6

TREATED BU/ACRE

-VS-

244.3

CONTROL BU/ACRE

BU/ACRE



IONfxTM is a mix of genetically identified and patented bacteria, along with archaea and fungi. While many microbes live naturally in a plant, this mix of microorganisms has been selected to support, enhance, or supplement plant functions. IONfxTM unlocks a plants ability to produce growth regulators and metabolites.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

OSAKIS, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 22, 2022
PLANTED

OCT. 22, 2022
HARVESTED

ION_{fx}TM

-vs-

CONTROL

22.8%

TREATED MOISTURE

-vs-

22.2%

TREATED MOISTURE

56.0

TEST WEIGHT

-vs-

56.0

TEST WEIGHT

237.7

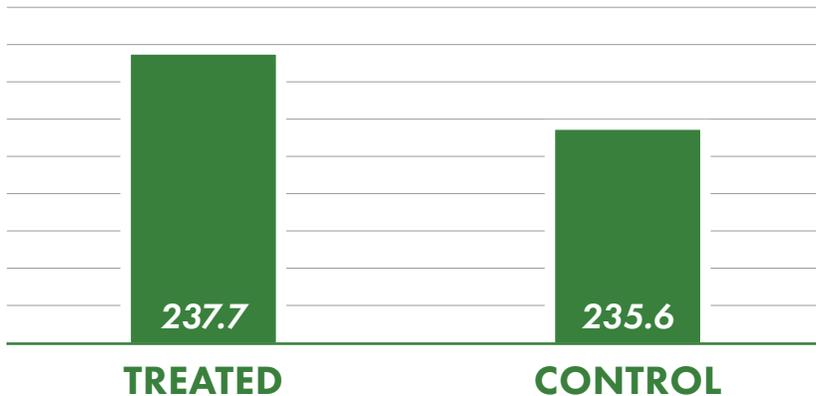
TREATED BU/ACRE

-vs-

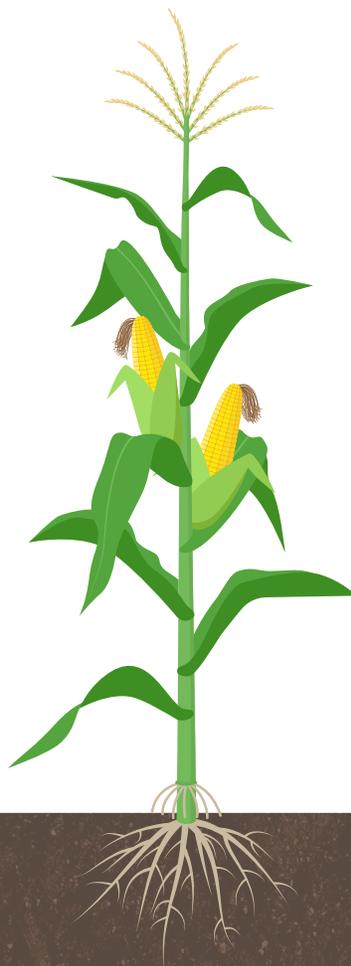
235.6

CONTROL BU/ACRE

BU/ACRE



ION_{fx}TM is a mix of genetically identified and patented bacteria, along with archaea and fungi. While many microbes live naturally in a plant, this mix of microorganisms has been selected to support, enhance, or supplement plant functions. ION_{fx}TM unlocks a plants ability to produce growth regulators and metabolites.



IMPROVED EAR FILL

Microbes help improve nutrient uptake throughout the entire season leading to improved ear fill.

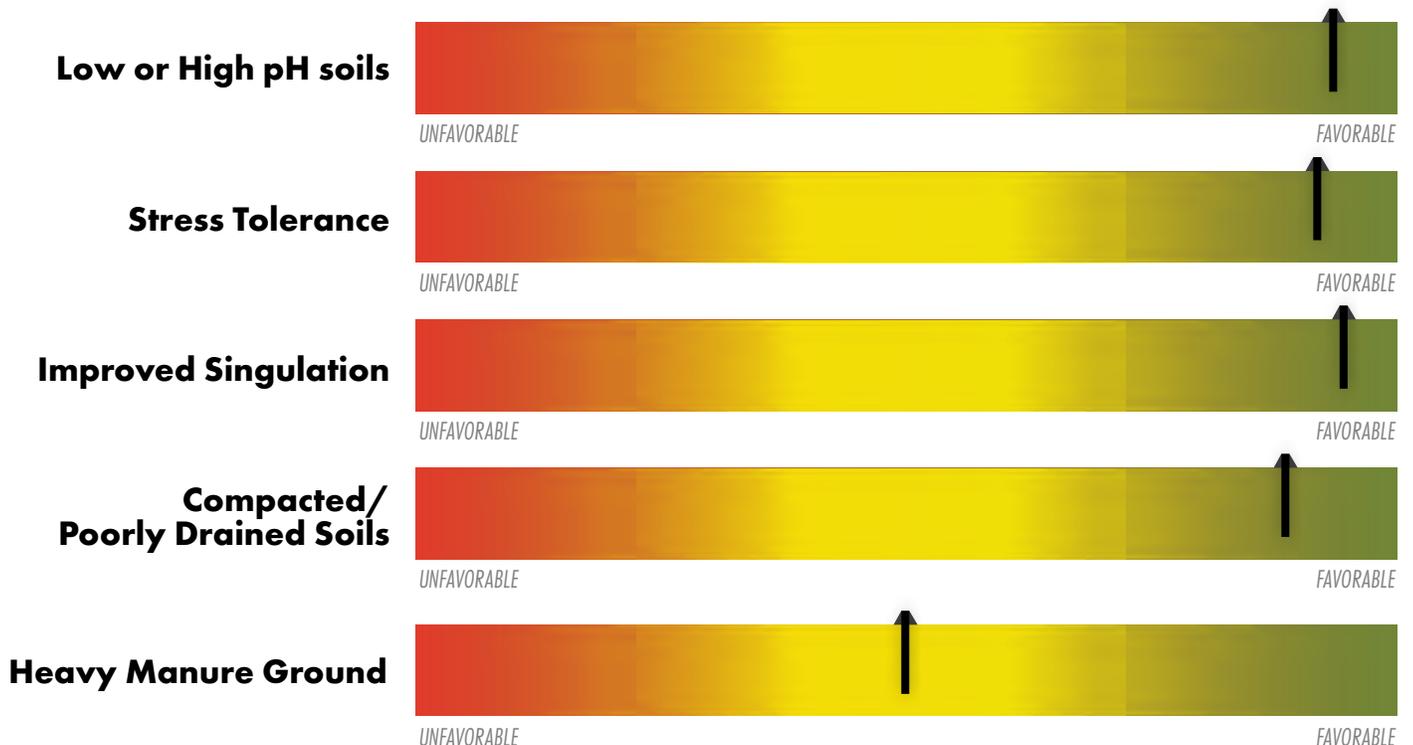
SEED FLOWABILITY

Provides a cleaner, safer lubrication and improved singulation compared to Talc/Graphite.

IMPROVED SOIL NUTRIENT UPTAKE

Microbes within Terrasym 450 + Dust release enzymes that attach to micronutrients and deliver to the plant.

Acre MATCHMAKER





TERRASYM 450 + DUST

2022 Data Results

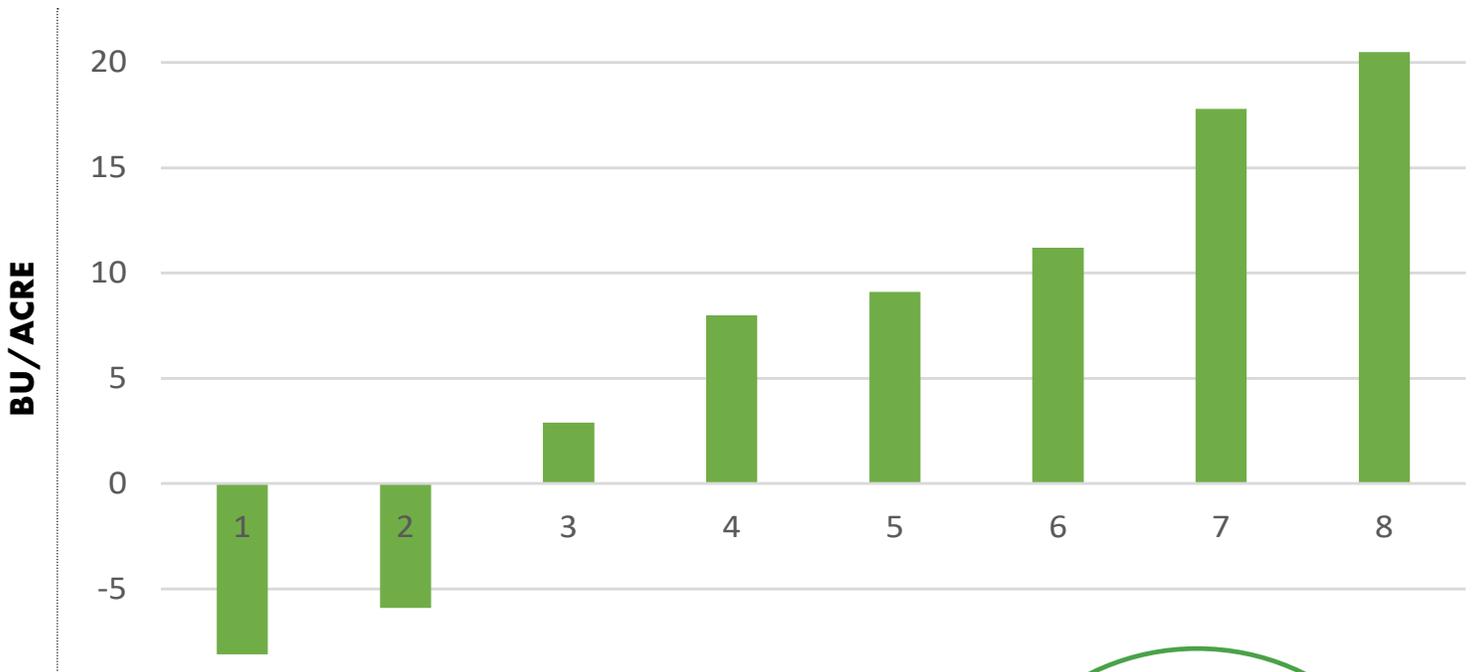
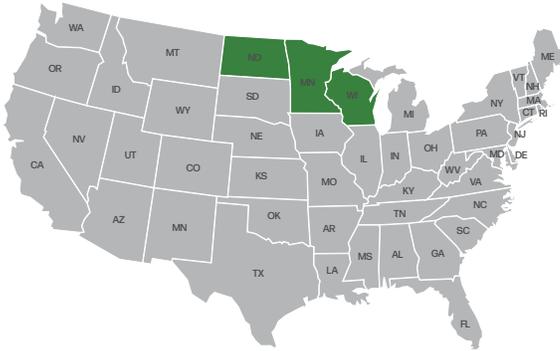
8
DATA POINTS

75%
POSITIVE RESPONSE

3
STATES

6.9 BU/ACRE
AVERAGE INCREASE

8
LOCATIONS



COMMENTS

A very successful first year of trials for our newest product Terrasym 450 + Dust. With increased root development and an enhanced ability to utilize nutrients, this product proved it has the ability to deliver a significant ROI while being extremely simple to use as a planter box treatment.

11.6

BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 21, 2022
HARVESTED



-VS-

CONTROL

22.9%

TREATED MOISTURE

-VS-

24.5%

TREATED MOISTURE

169.6

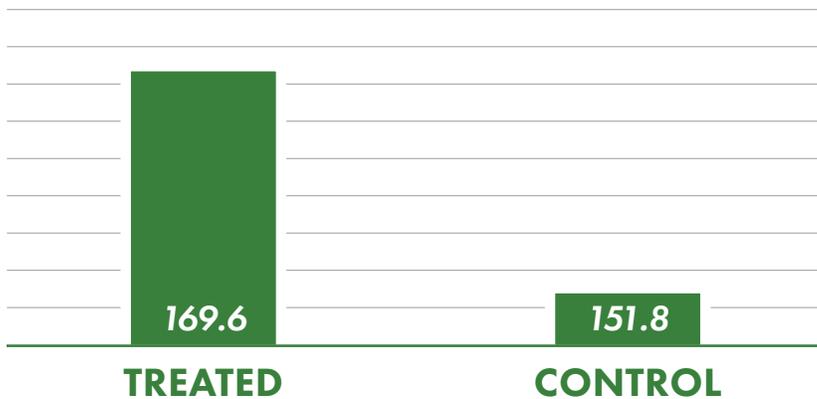
TREATED BU/ACRE

-VS-

151.8

CONTROL BU/ACRE

BU/ACRE



Terrasym 450 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CANNON FALLS, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 31, 2022
HARVESTED



-VS-

CONTROL

17.3%

TREATED MOISTURE

-VS-

17.4%

TREATED MOISTURE

243.2

TREATED BU/ACRE

-VS-

235.2

CONTROL BU/ACRE

BU/ACRE



8.0

BU/ACRE

ADVANTAGE

TREATED

CONTROL

Terrasym 450 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

CROOKSTON, MN
LOCATION

CORN
CROP TYPE

LR 9181 VIP3110A
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 18, 2022
HARVESTED



-VS-

CONTROL

18.8%
TREATED MOISTURE

-VS-

18.7%
TREATED MOISTURE

175.3
TREATED BU/ACRE

-VS-

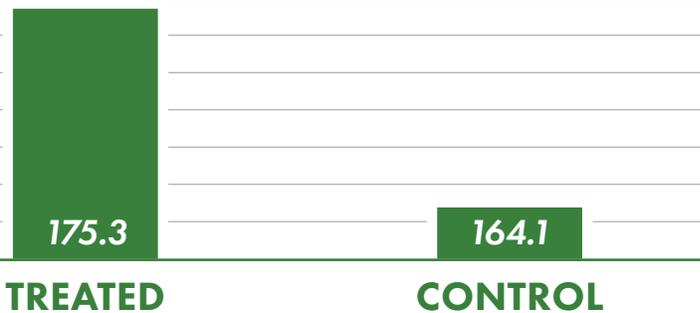
164.1
CONTROL BU/ACRE

BU/ACRE



11.2
BU/ACRE

ADVANTAGE



Terrasym 450 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FAIRFAX, MN
LOCATION

CORN
CROP TYPE

4296 VT2P RIB
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 25, 2022
PLANTED

OCT. 21, 2022
HARVESTED



-VS-

CONTROL

15.2%
TREATED MOISTURE

-VS-

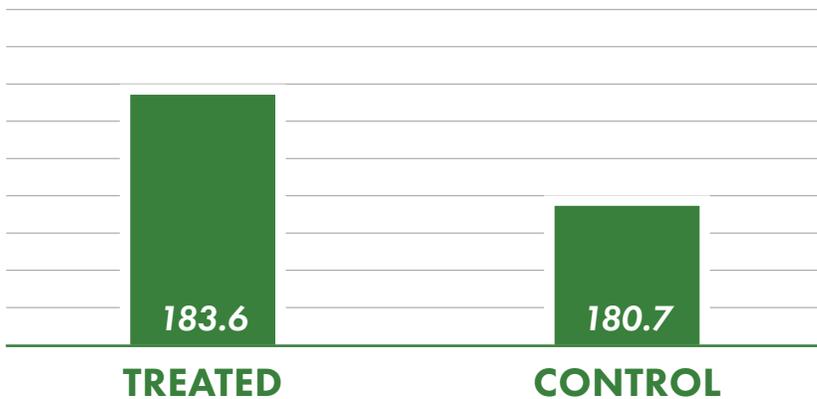
14.5%
TREATED MOISTURE

183.6
TREATED BU/ACRE

-VS-

180.7
CONTROL BU/ACRE

BU/ACRE



Terrasym 450 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HARVEY, ND
LOCATION

CORN
CROP TYPE

LR 9181 VIP3110A
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 14, 2022
HARVESTED



-VS-

CONTROL

18.8%
TREATED MOISTURE

-VS-

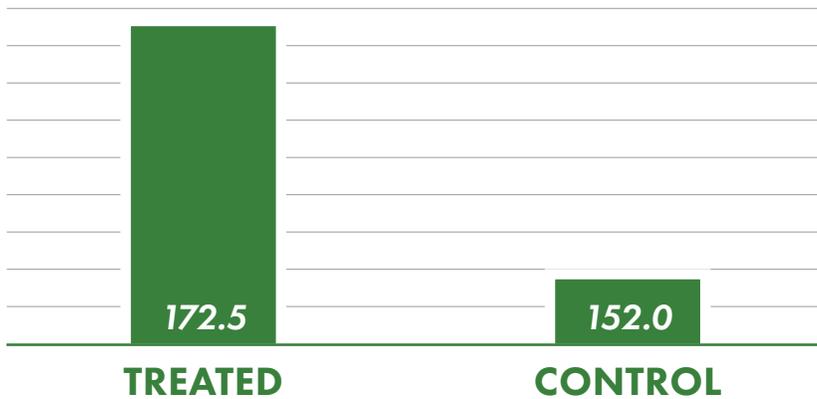
19.3%
TREATED MOISTURE

172.5
TREATED BU/ACRE

-VS-

152.0
CONTROL BU/ACRE

BU/ACRE



Terrasym 450 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

CORN
CROP TYPE

LR 4296 VT2P RIB
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 10, 2022
PLANTED

OCT. 11, 2022
HARVESTED



-VS-

CONTROL

18.8%

TREATED MOISTURE

-VS-

19.3%

TREATED MOISTURE

253.4

TREATED BU/ACRE

-VS-

244.3

CONTROL BU/ACRE

BU/ACRE



Terrasym 450 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

SOYBEANS





TRANSLOCATES & REPLICATES

In-furrow application allows Envita bacteria to enter through the root zone where it translocates and replicates throughout the plant. The bacteria begin colonizing and capturing atmospheric nitrogen.



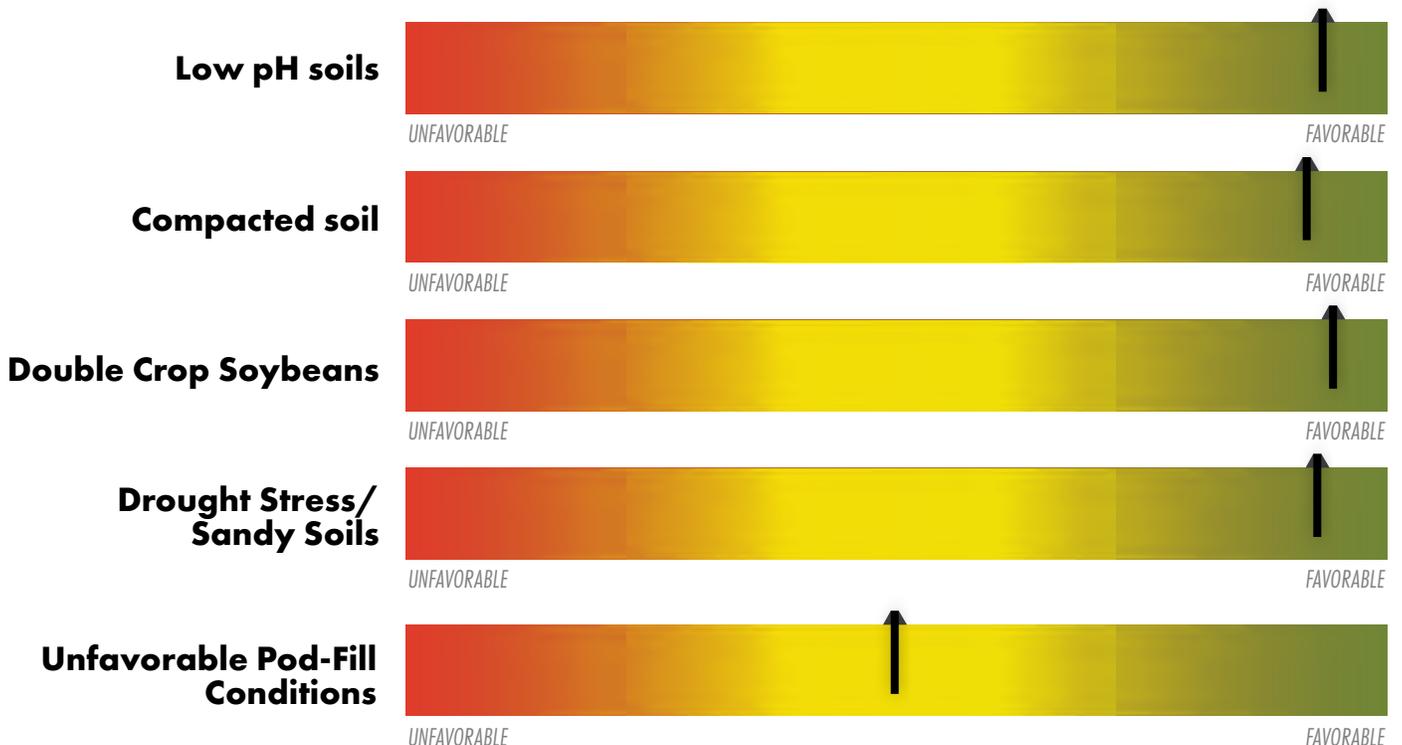
SEASON-LONG MODE OF ACTION

Bacteria create vesicles within the cells which capture atmospheric nitrogen providing season-long nitrogen nourishment.

BACTERIA ARE QUICK TO COLONIZE

With foliar application, Envita enters through the leaf stomata and into the plant cells. From there, the bacteria quickly begin to colonize and translocate throughout the plant.

Acre MATCHMAKER





SOYBEANS

2022 Data Results

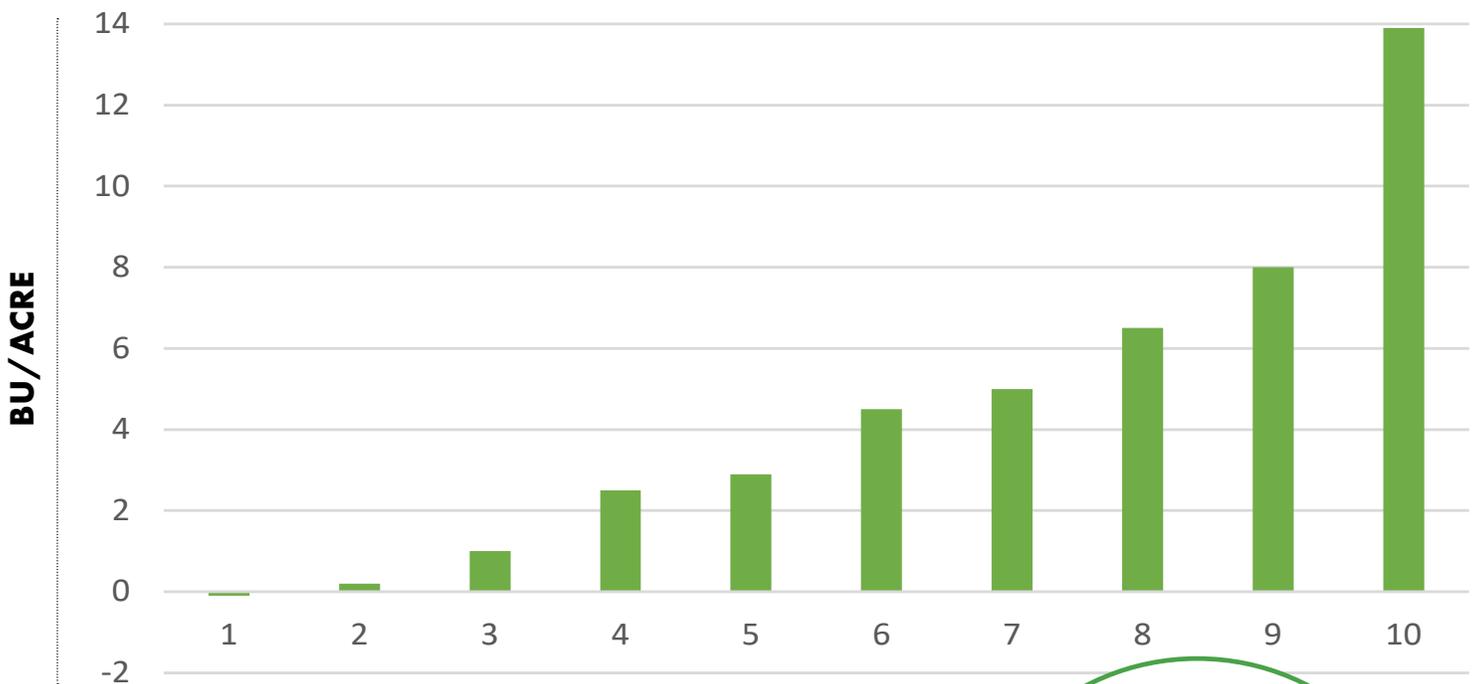
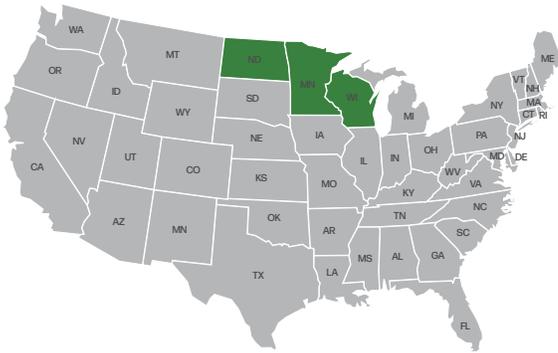
10
DATA POINTS

90%
POSITIVE RESPONSE

3
STATES

4.4 BU/ACRE
AVERAGE INCREASE

10
LOCATIONS



COMMENTS

Soybean growing conditions were ripe for the success of Envita in 2022. We had a dry first half of summer which allowed Envita to demonstrate just how well it can supplement the plant with nitrogen in adverse conditions. This was followed up with some nice shots of rain during podfill allowing for those plants to take advantage of the additional fertility.

4.9

BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**



SOYBEANS

Multi-Year Data Results

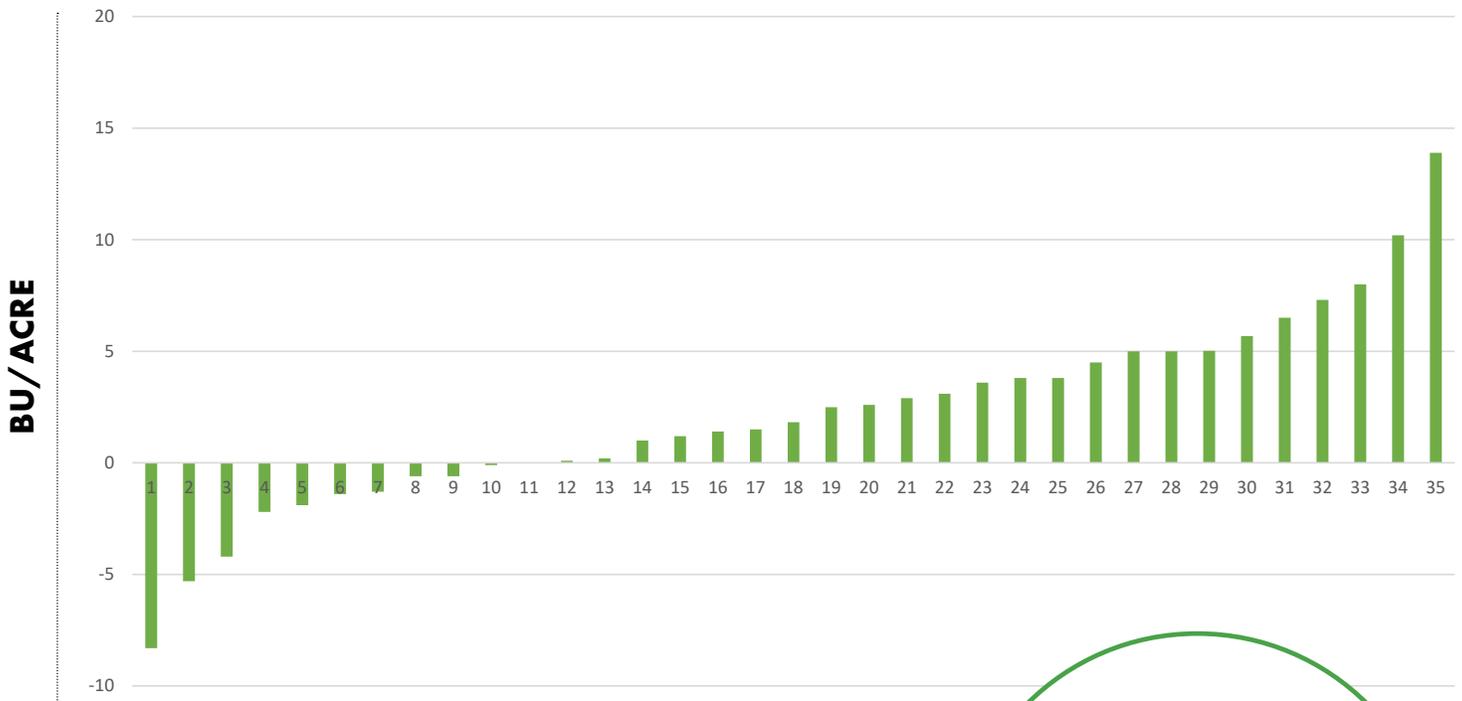
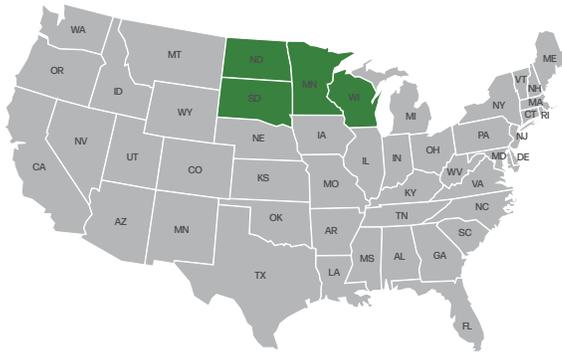
35
DATA POINTS

69%
POSITIVE RESPONSE

4
STATES

2.1 BU/ACRE
AVERAGE INCREASE

17
LOCATIONS



COMMENTS

The first two years of Envita soybean trials saw dramatically dry conditions during podfill which lent itself to lower win rates than expected. In 2022 we had a year that saw nice moisture during podfill allowing for the plant to take advantage of the extra yield potential Envita can deliver.

4.2
BU/ACRE

AVERAGE INCREASE
WHEN POSITIVE

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 11, 2022
HARVESTED

envita[®]

-VS-

CONTROL

12.3%

TREATED MOISTURE

-VS-

12.5%

TREATED MOISTURE

61.6

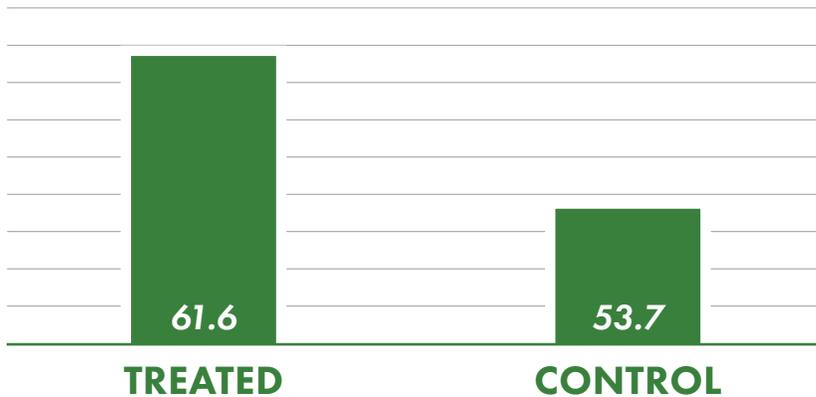
TREATED BU/ACRE

-VS-

53.7

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FAIRFAX, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 11, 2022
HARVESTED

envita[®]

-vs-

CONTROL

9.8%

TREATED MOISTURE

-vs-

10.4%

TREATED MOISTURE

59.4

TEST WEIGHT

-vs-

59.1

TEST WEIGHT

56.1

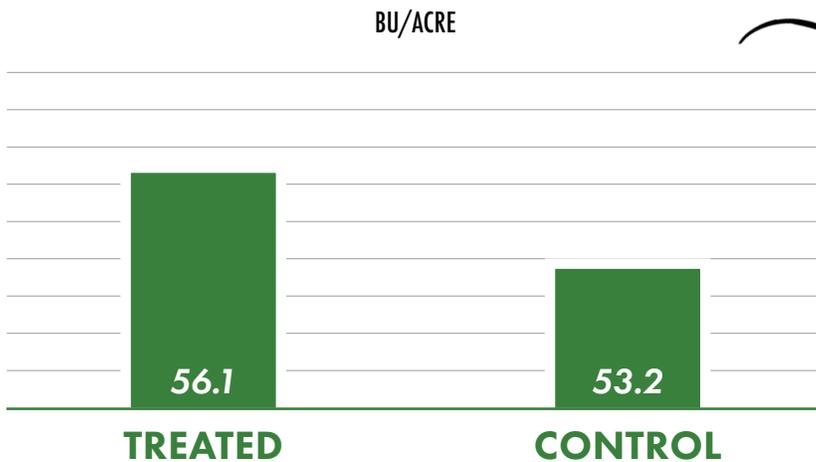
TREATED BU/ACRE

-vs-

53.2

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FREMONT, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 20, 2022
HARVESTED

envita[®]

-vs-

CONTROL

13.4%
TREATED MOISTURE

-vs-

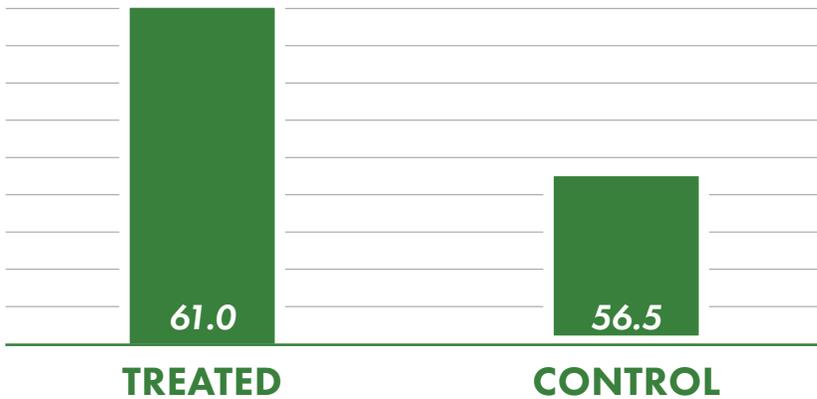
13.7%
TREATED MOISTURE

61.0
TREATED BU/ACRE

-vs-

56.5
CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HAGER CITY, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 9, 2022
PLANTED

OCT. 18, 2022
HARVESTED

envita[®]

-vs-

CONTROL

11.3%

TREATED MOISTURE

-vs-

11.4%

TREATED MOISTURE

57.0

TEST WEIGHT

-vs-

57.0

TEST WEIGHT

64.0

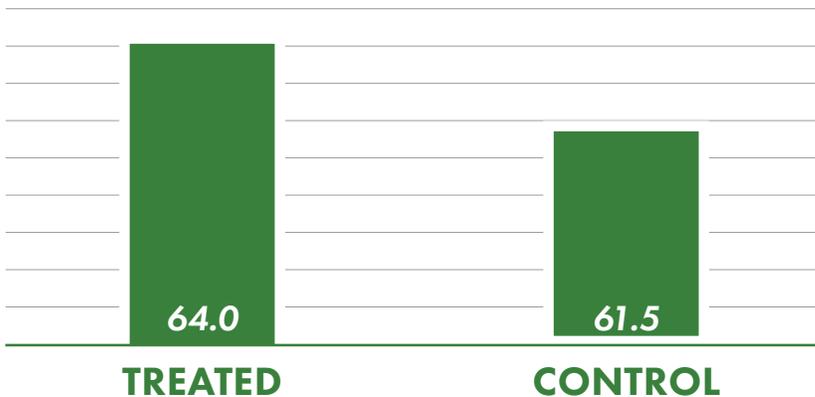
TREATED BU/ACRE

-vs-

61.5

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HARVEY, ND
LOCATION

SOYBEANS
CROP TYPE

03X329
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 14, 2022
HARVESTED

envita[®]

-vs-

CONTROL

10.1%

TREATED MOISTURE

-vs-

10.0%

TREATED MOISTURE

59.6

TEST WEIGHT

-vs-

60.0

TEST WEIGHT

46.0

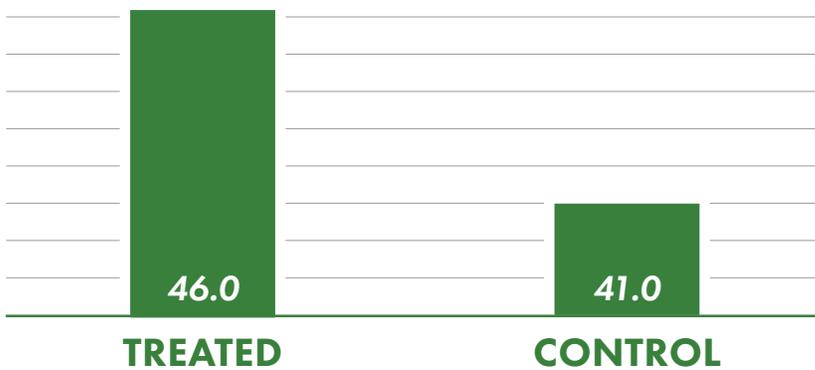
TREATED BU/ACRE

-vs-

41.0

CONTROL BU/ACRE

BU/ACRE



5.0
BU/ACRE

ADVANTAGE

Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 23, 2022
PLANTED

OCT. 10, 2022
HARVESTED

envita[®]

-vs-

CONTROL

9.7%

TREATED MOISTURE

-vs-

9.7%

TREATED MOISTURE

56.0

TEST WEIGHT

-vs-

57.4

TEST WEIGHT

76.4

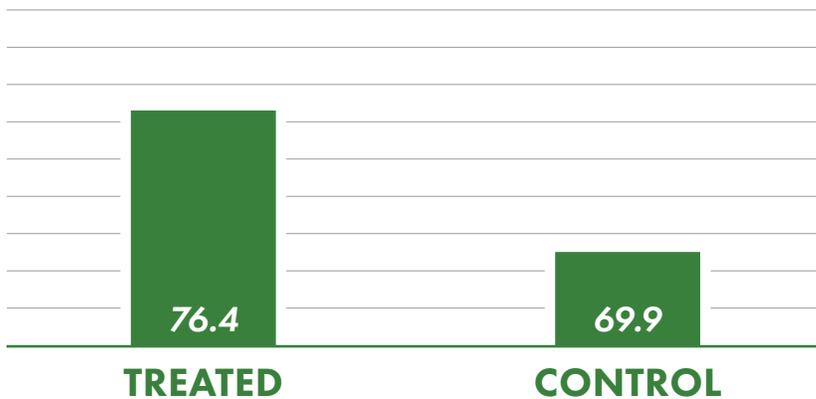
TREATED BU/ACRE

-vs-

69.9

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

NEW YORK MILLS, MN
LOCATION

SOYBEANS
CROP TYPE

PIONEER ENLIST RM .8
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 30, 2022
PLANTED

OCT. 11, 2022
HARVESTED

envita[®]

-vs-

CONTROL

10.3%

TREATED MOISTURE

-vs-

10.5%

TREATED MOISTURE

67.1

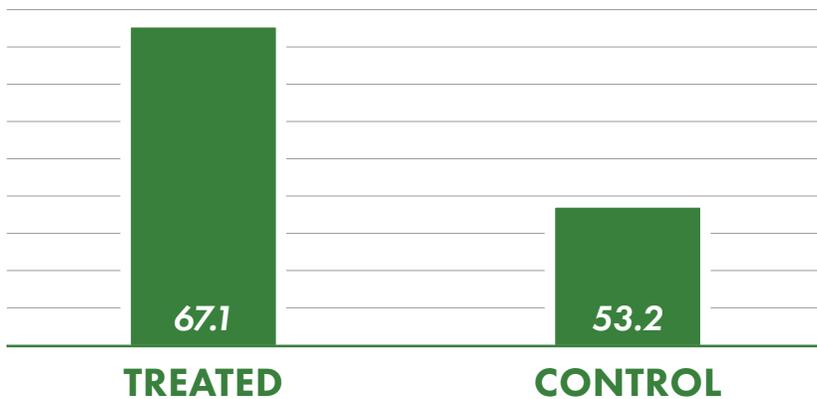
TREATED BU/ACRE

-vs-

53.2

CONTROL BU/ACRE

BU/ACRE



13.9

BU/ACRE

ADVANTAGE

Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

OSAKIS, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 7, 2022
HARVESTED

envita[®]

-vs-

CONTROL

18.0%

TREATED MOISTURE

-vs-

18.1%

TREATED MOISTURE

56.0

TEST WEIGHT

-vs-

56.0

TEST WEIGHT

72.8

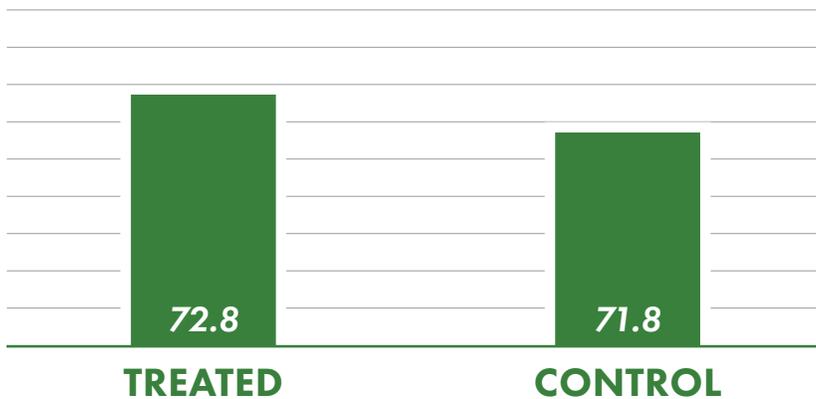
TREATED BU/ACRE

-vs-

71.8

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

RICE, MN
LOCATION

SOYBEANS
CROP TYPE

10E125N
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 2, 2022
HARVESTED

envita[®]

-vs-

CONTROL

13.0%

TREATED MOISTURE

-vs-

13.5%

TREATED MOISTURE

60.0

TEST WEIGHT

-vs-

60.0

TEST WEIGHT

59.3

TREATED BU/ACRE

-vs-

59.1

CONTROL BU/ACRE

BU/ACRE



Envita is a nitrogen fixing solution that changes the nitrogen equation on your farm. With the ability to be used in-furrow or foliar, Envita is easy to apply. The bacteria within Envita colonize and live in the plant (both in above and below ground tissue) to enable nitrogen fixation throughout the plant.



INCREASE IN P & K AVAILABILITY

Nutriquire contains spore forming microbes that improve phosphorus and potassium availability through the creation of organic and inorganic acids. These organic and inorganic acids alter the pH locally allowing for the release of more phosphorus and potassium.

NITROGEN AVAILABILITY

Nutriquire converts soil N to plant available forms quicker allowing for less nutrient run off and improved plant availability.

EASY TO APPLY

With a wide range of application methods, Nutriquire can be applied in-furrow, foliar, side dressed, or fertigated for easy incorporation into any operation.

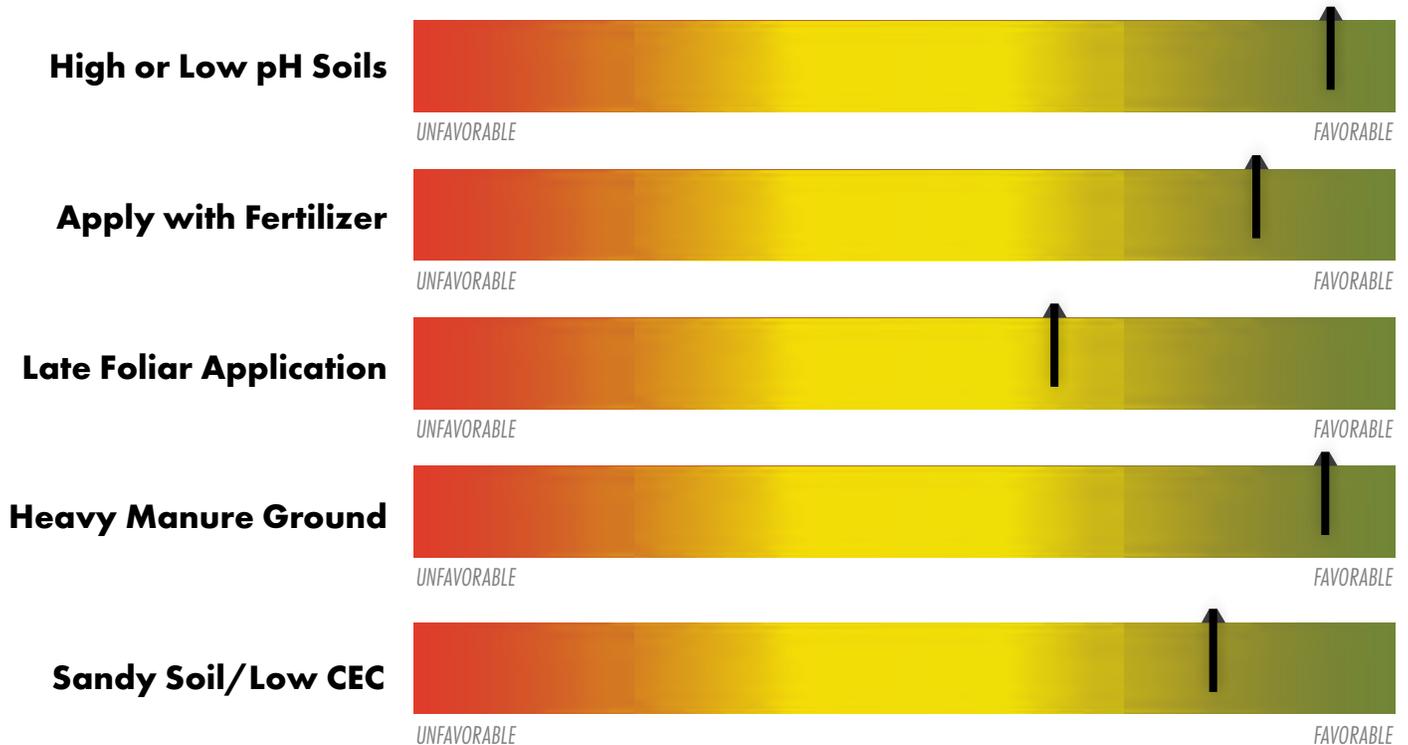
IMPROVED NUTRIENT UPTAKE

Overall plant nutrient efficiency, availability, and uptake is improved through the microbes found in Nutriquire as they aid in breaking soil bonds that typically make nutrients unavailable.

VERSATILITY

Nutriquire contains spore forming bacteria, meaning they are dormant, allowing for longer shelf life and versatility of application methods.

Acre MATCHMAKER





SOYBEANS

2022 Data Results

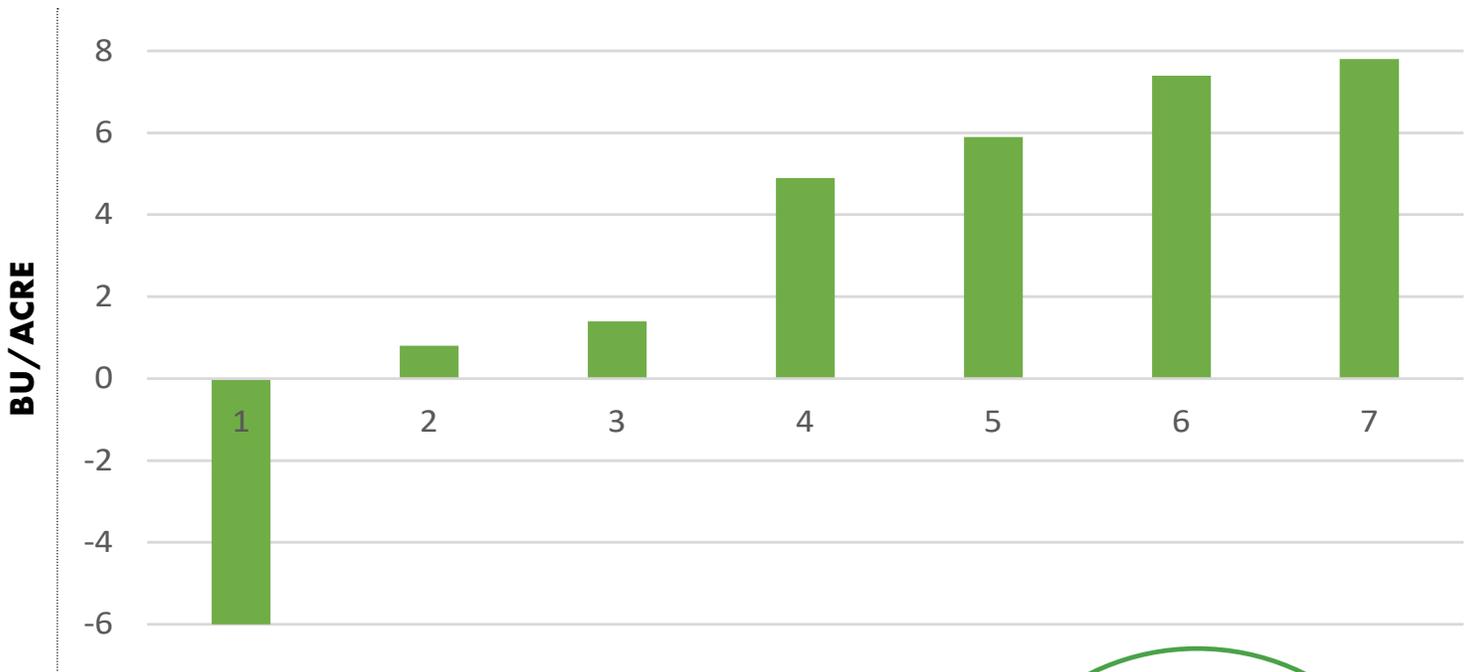
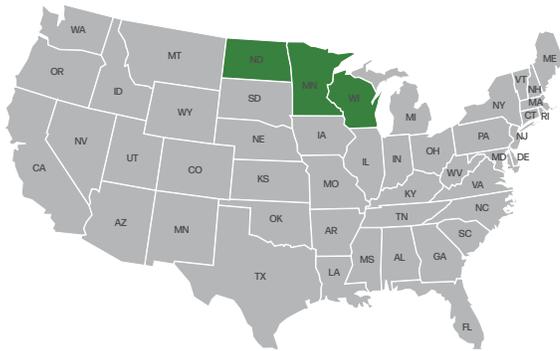
7
DATA POINTS

86%
POSITIVE RESPONSE

3
STATES

3.2 BU/ACRE
AVERAGE INCREASE

7
LOCATIONS



COMMENTS

Nutriquire had an exceptional first year of trials in our soybean plots. Part of the mode of action of Nutriquire is potassium mineralization. It's no surprise that with the late potassium needs of soybeans, Nutriquire would fit this crop really well. Combine that with the product's ability to solubilize phosphorus and you have something special.

4.7
BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 11, 2022
HARVESTED

Nutriquire[™]

-VS-

CONTROL

12.5%

TREATED MOISTURE

-VS-

12.5%

TREATED MOISTURE

61.4

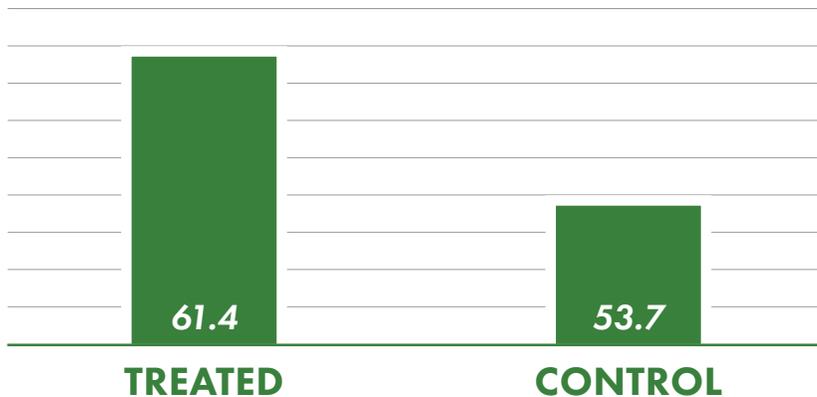
TREATED BU/ACRE

-VS-

53.7

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FAIRFAX, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 11, 2022
HARVESTED

Nutriquire

-vs-

CONTROL

9.9%

TREATED MOISTURE

-vs-

10.4%

TREATED MOISTURE

60.1

TEST WEIGHT

-vs-

59.1

TEST WEIGHT

58.2

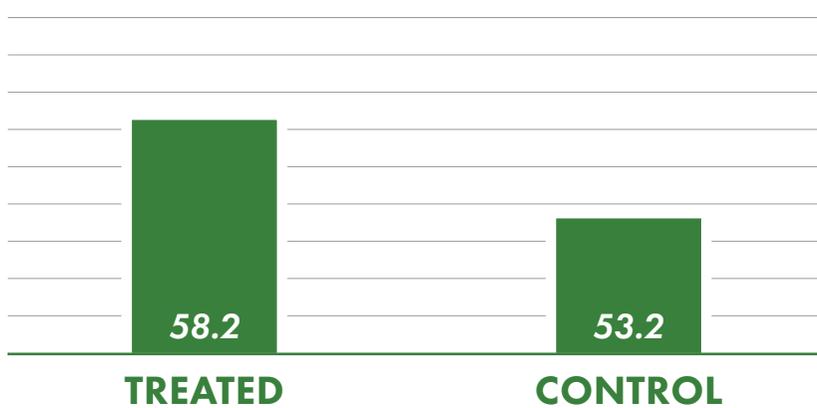
TREATED BU/ACRE

-vs-

53.2

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FREMONT, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 20, 2022
HARVESTED

Nutriquire

-vs-

CONTROL

13.7%

TREATED MOISTURE

-vs-

13.7%

TREATED MOISTURE

58.0

TEST WEIGHT

-vs-

58.0

TEST WEIGHT

57.3

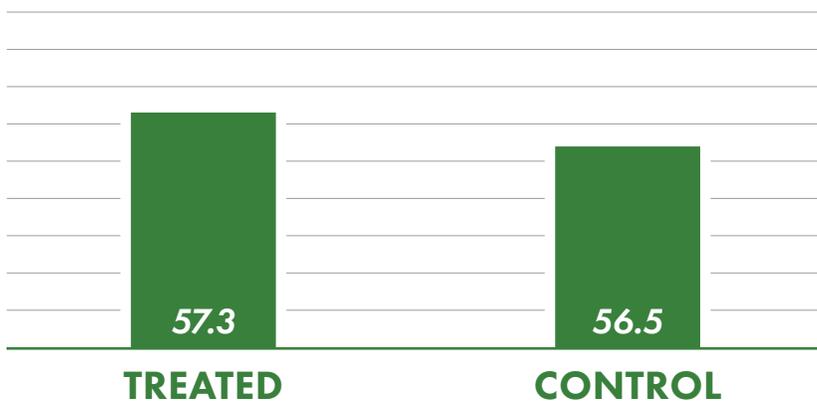
TREATED BU/ACRE

-vs-

56.5

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HAGER CITY, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

FOLIAR
APPLICATION METHOD

MAY 9, 2022
PLANTED

OCT. 18, 2022
HARVESTED

Nutriquire

-vs-

CONTROL

11.3%

TREATED MOISTURE

-vs-

11.4%

TREATED MOISTURE

57.0

TEST WEIGHT

-vs-

57.0

TEST WEIGHT

67.4

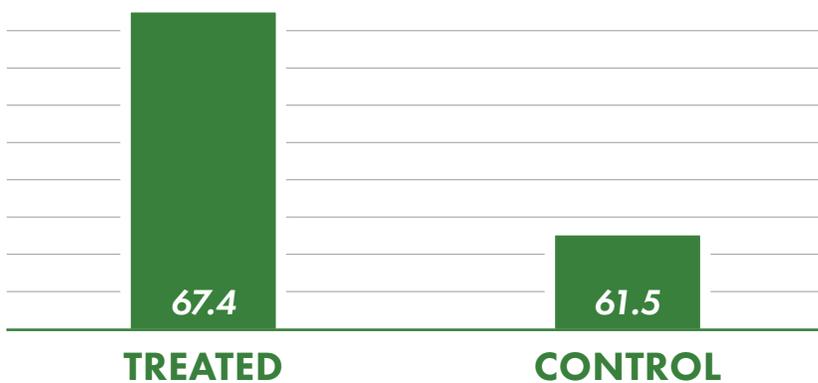
TREATED BU/ACRE

-vs-

61.5

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 23, 2022
PLANTED

OCT. 10, 2022
HARVESTED

Nutriquire

-vs-

CONTROL

9.7%

TREATED MOISTURE

-vs-

9.7%

TREATED MOISTURE

57.2

TEST WEIGHT

-vs-

57.4

TEST WEIGHT

77.3

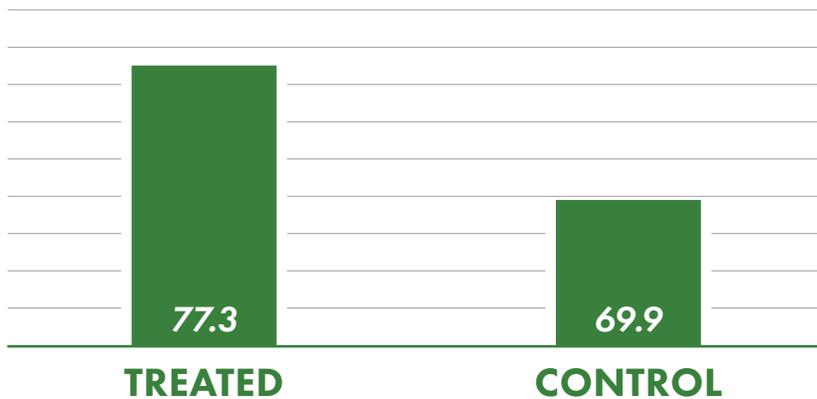
TREATED BU/ACRE

-vs-

69.9

CONTROL BU/ACRE

BU/ACRE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

OSAKIS, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

IN-FURROW
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 7, 2022
HARVESTED

Nutriquire[™]

-vs-

CONTROL

18.2%
TREATED MOISTURE

-vs-

18.1%
TREATED MOISTURE

56.0
TEST WEIGHT

-vs-

56.0
TEST WEIGHT

73.2
TREATED BU/ACRE

-vs-

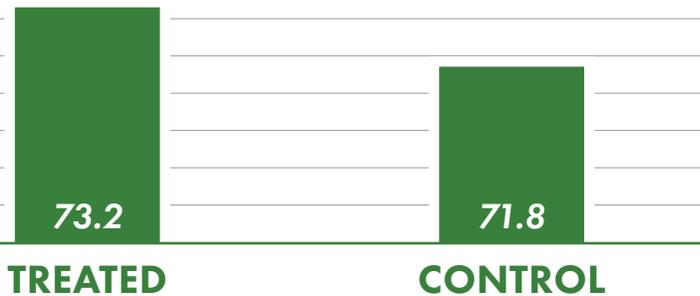
71.8
CONTROL BU/ACRE

BU/ACRE



1.4
BU/ACRE

ADVANTAGE



Nutriquire is a microbial-based product that increases the active biomass in the soil resulting in improved plant vigor and nutrient cycling. Many of the bacteria found in the Nutriquire are spore forming bacteria allowing for flexible mixing and application options.

Soy_{fx}™

INCREASED FLOWERS & PODS

Additional branching leads to more flowers and pods. With proper moisture and fertility this leads to higher yield.



STRESS MITIGATION

Specific strains of microbes within Soy_{fx} modulate pH throughout the day reducing plant stress and ethylene production.

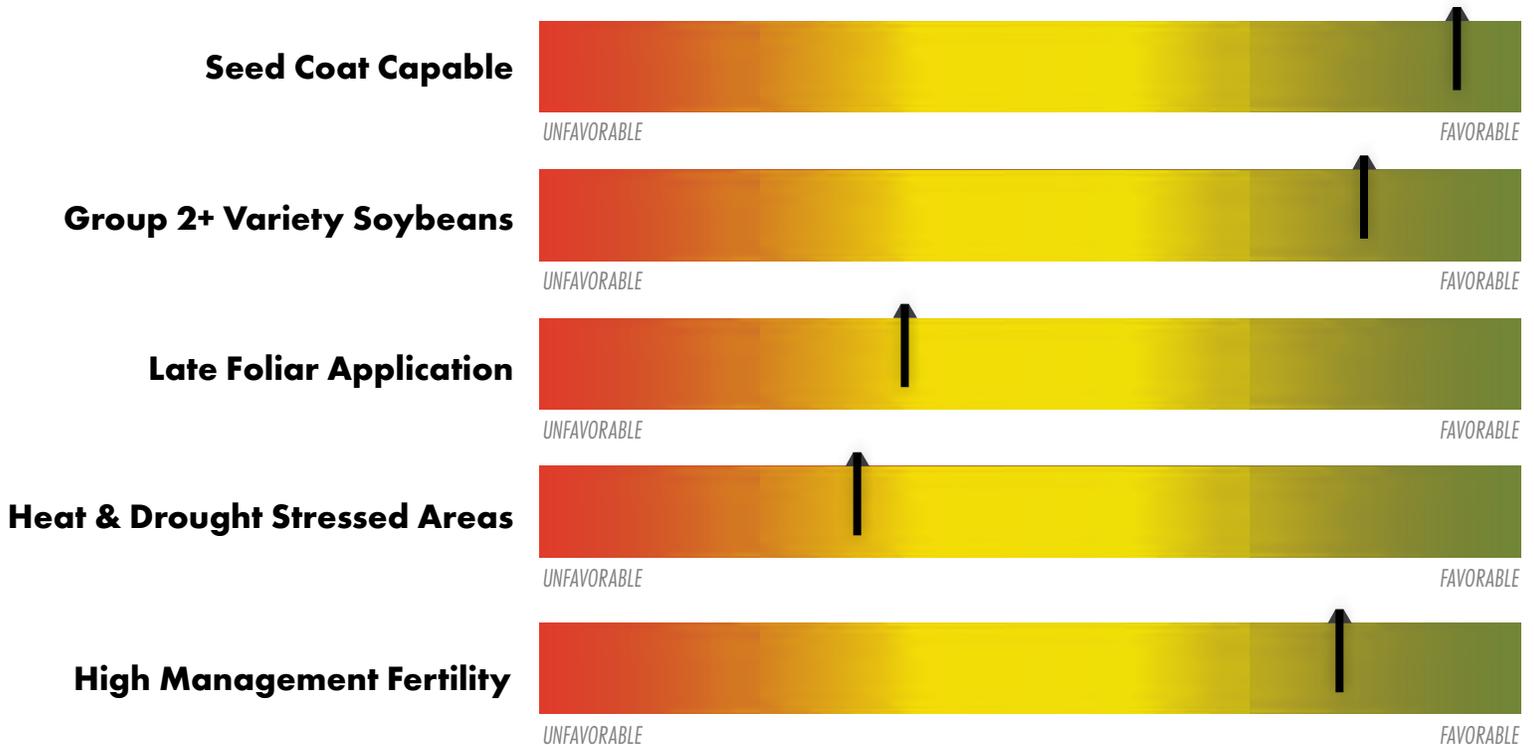
ADDITIONAL BRANCHING

Specially identified microbes within Soy_{fx} activate the lower axillary buds encouraging the development of more branches. This attribute also aids in recovery after a hail event.

INCREASED NODULATION

Facultative anaerobic bacteria (bacteria that can survive without oxygen) promote and support the production of increased nodulation.

Acre MATCHMAKER





SOY_{fx}

2022 Data Results

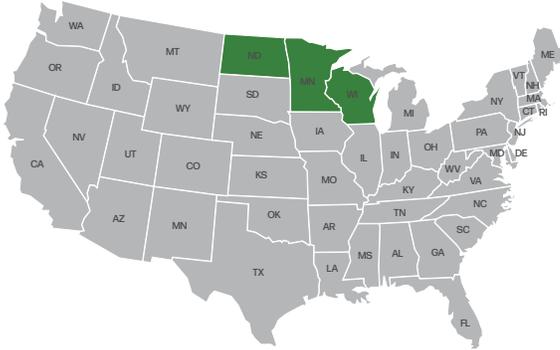
7
DATA POINTS

100%
POSITIVE RESPONSE

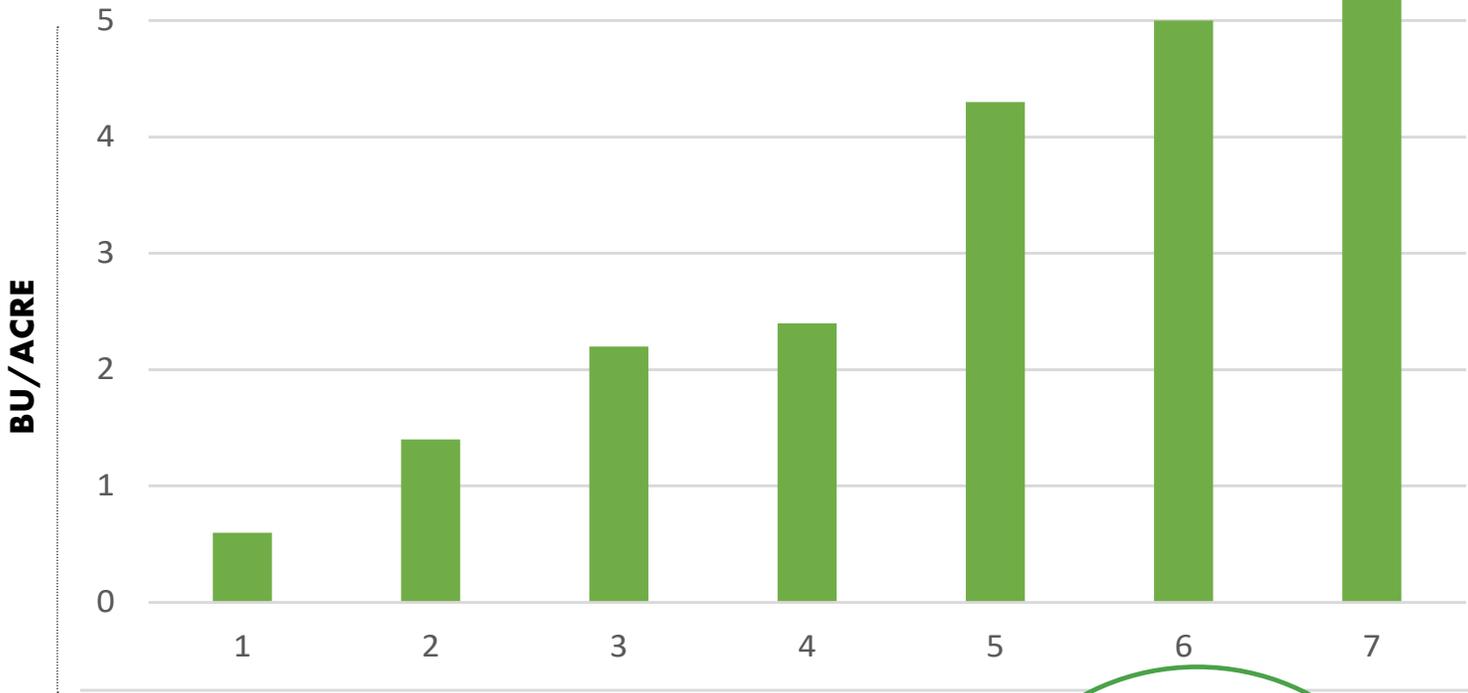
3
STATES

3.0 BU/ACRE
AVERAGE INCREASE

7
LOCATIONS



Soy_{fx}TM



COMMENTS

Soy_{fx} saw a year in 2022 that allowed all of the additional yield potential this product provides come to fruition thanks to some late season rains during podfill.

3.0
BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**



SOY_{FX}

Multi-Year Data Results

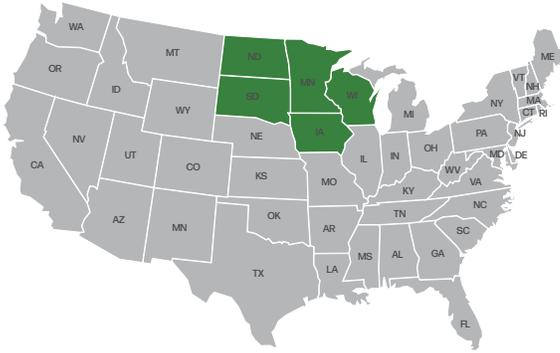
73
DATA POINTS

56%
POSITIVE RESPONSE

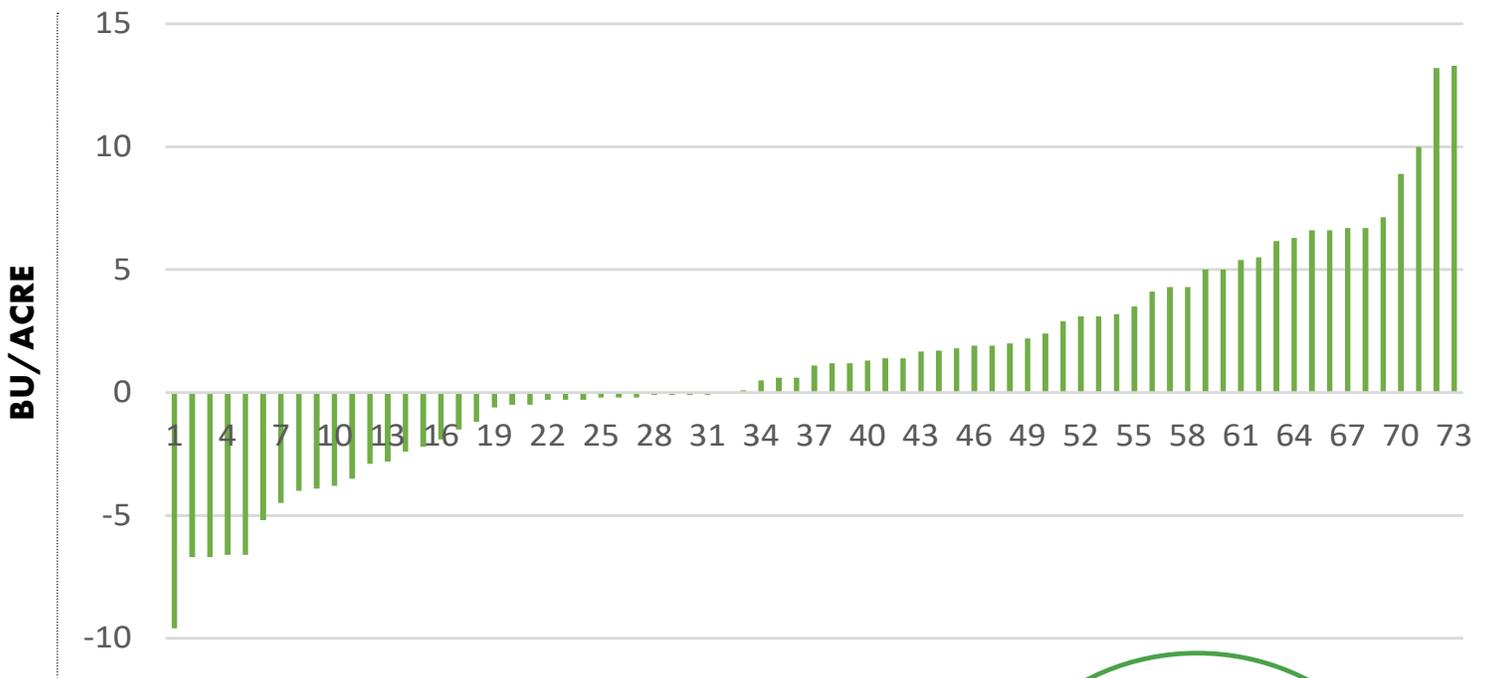
5
STATES

1.2 BU/ACRE
AVERAGE INCREASE

28
LOCATIONS



Soy_{fx}™



COMMENTS

Don't let the multi-year win rate on this product fool you. When we receive moisture during podfill this product performs! Unfortunately a few years of drought across many of our trial locations have unfairly skewed the numbers on this product. With an average increase of 4 bu/acre when positive its worth taking a chance on.

4.0
BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 11, 2022
HARVESTED

Soyfx™

-vs-

CONTROL

12.3%
TREATED MOISTURE

-vs-

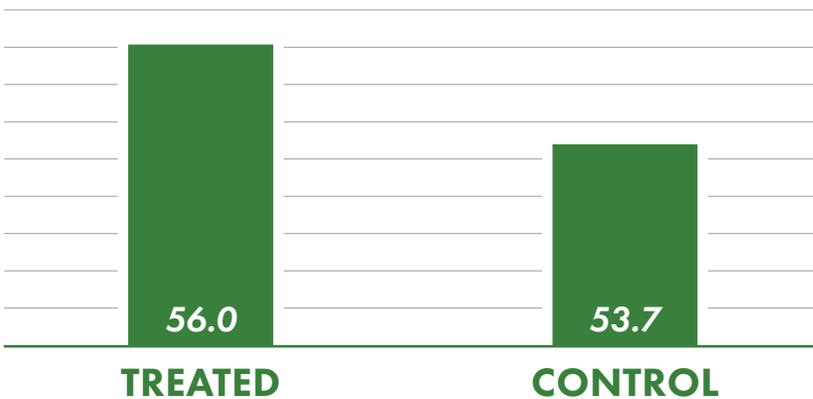
12.5%
TREATED MOISTURE

56.0
TREATED BU/ACRE

-vs-

53.7
CONTROL BU/ACRE

BU/ACRE



Soyfx™ is a specific/unique combination of identified and tested microbials that elicit a positive crop response. Soyfx™ unlocks the plant's ability to produce growth regulators and metabolites that enhance production through biosynthetic pathway efficiencies.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FAIRFAX, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 11, 2022
HARVESTED

Soyfx™

-vs-

CONTROL

10.4%

TREATED MOISTURE

-vs-

9.9%

TREATED MOISTURE

60.0

TEST WEIGHT

-vs-

59.1

TEST WEIGHT

57.5

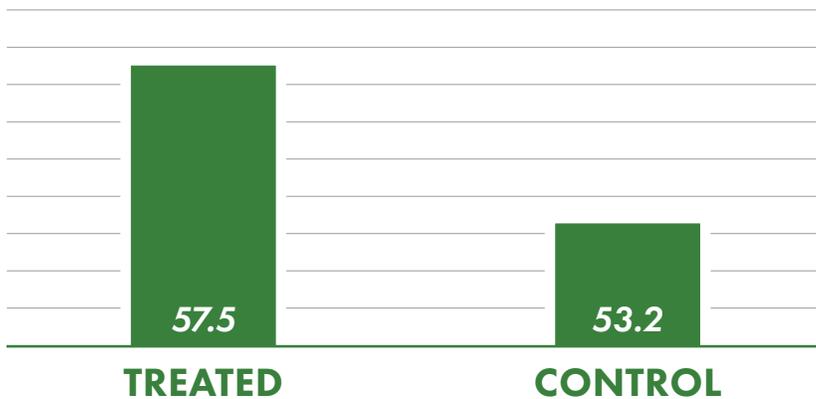
TREATED BU/ACRE

-vs-

53.2

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FREMONT, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 20, 2022
HARVESTED

Soyfx™

-vs-

CONTROL

13.4%

TREATED MOISTURE

-vs-

13.7%

TREATED MOISTURE

61.9

TREATED BU/ACRE

-vs-

56.5

CONTROL BU/ACRE

BU/ACRE



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2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HAGER CITY, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 9, 2022
PLANTED

OCT. 18, 2022
HARVESTED

Soyfx™

-vs-

CONTROL

11.5%

TREATED MOISTURE

-vs-

11.4%

TREATED MOISTURE

63.7

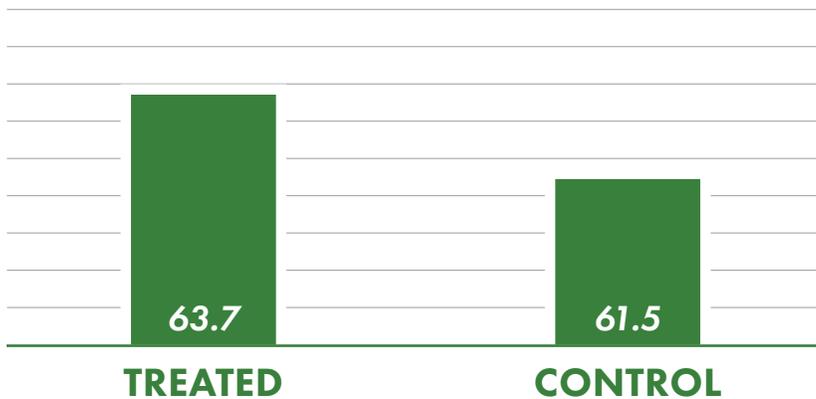
TREATED BU/ACRE

-vs-

61.5

CONTROL BU/ACRE

BU/ACRE



Soyfx™ is a specific/unique combination of identified and tested microbials that elicit a positive crop response. Soyfx™ unlocks the plant's ability to produce growth regulators and metabolites that enhance production through biosynthetic pathway efficiencies.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HARVEY, ND
LOCATION

SOYBEANS
CROP TYPE

03X329
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 14, 2022
HARVESTED

Soyfx™

-vs-

CONTROL

10.0%
TREATED MOISTURE

-vs-

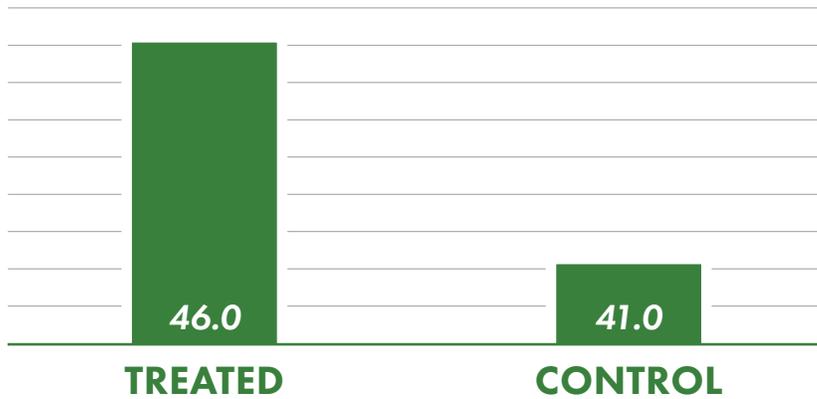
10.0%
TREATED MOISTURE

46.0
TREATED BU/ACRE

-vs-

41.0
CONTROL BU/ACRE

BU/ACRE



Soyfx™ is a specific/unique combination of identified and tested microbials that elicit a positive crop response. Soyfx™ unlocks the plant's ability to produce growth regulators and metabolites that enhance production through biosynthetic pathway efficiencies.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 23, 2022
PLANTED

OCT. 10, 2022
HARVESTED

Soyfx™

-vs-

CONTROL

9.8%

TREATED MOISTURE

-vs-

9.7%

TREATED MOISTURE

56.3

TEST WEIGHT

-vs-

57.4

TEST WEIGHT

71.3

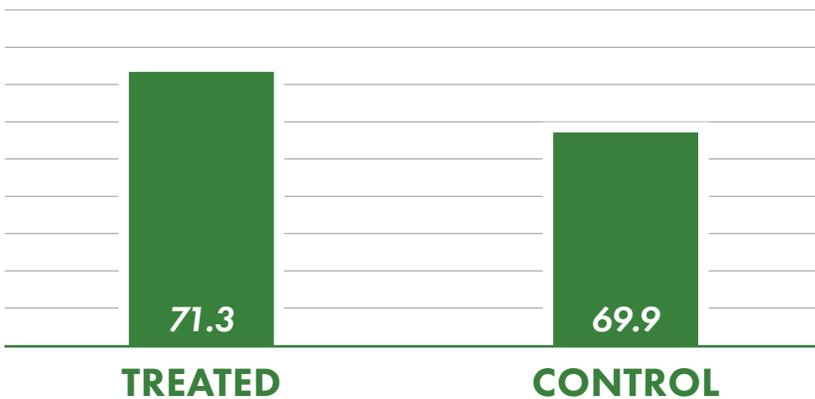
TREATED BU/ACRE

-vs-

69.9

CONTROL BU/ACRE

BU/ACRE



Soyfx™ is a specific/unique combination of identified and tested microbials that elicit a positive crop response. Soyfx™ unlocks the plant's ability to produce growth regulators and metabolites that enhance production through biosynthetic pathway efficiencies.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

OSAKIS, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

SEED COAT
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 7, 2022
HARVESTED

Soyfx™

-vs-

CONTROL

17.8%

TREATED MOISTURE

-vs-

18.1%

TREATED MOISTURE

55.5

TEST WEIGHT

-vs-

56.0

TEST WEIGHT

72.4

TREATED BU/ACRE

-vs-

71.8

CONTROL BU/ACRE

BU/ACRE



Soyfx™ is a specific/unique combination of identified and tested microbials that elicit a positive crop response. Soyfx™ unlocks the plant's ability to produce growth regulators and metabolites that enhance production through biosynthetic pathway efficiencies.



IDC TOLERANCE

Minimizes the impact of iron deficiency in the plant by allowing for greater iron uptake. Data shows average of 19.4% increase in the leaf tissue compared to the control.

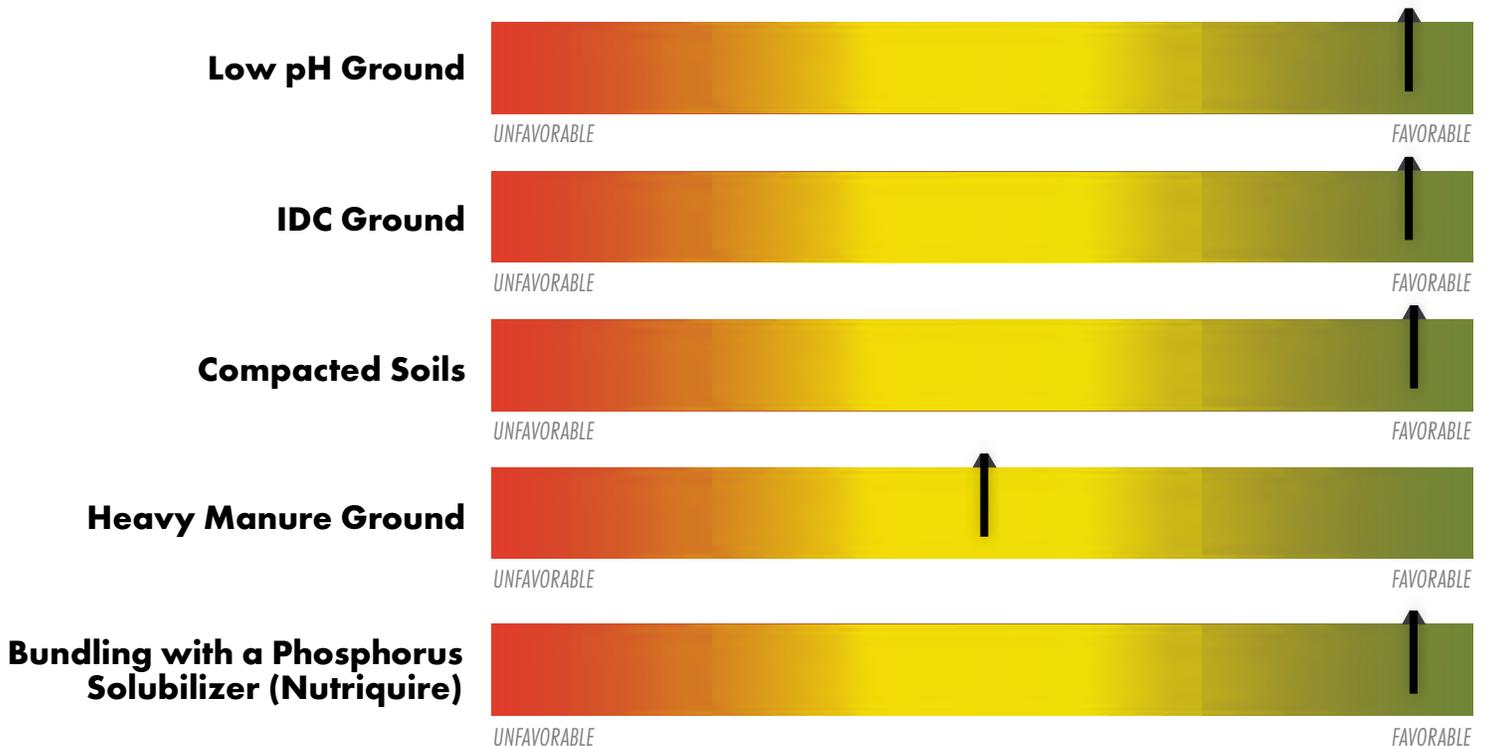
IRON UPTAKE

Bacteria within Terrasym 401 + Dust produce siderophores which bind iron and concentrate it in the root zone as a plant available form.

ROOT DEVELOPMENT

Improved nutrient and micronutrient uptake allows for enhanced root development.

Acre MATCHMAKER





TERRASYM 401 + DUST

2022 Data Results

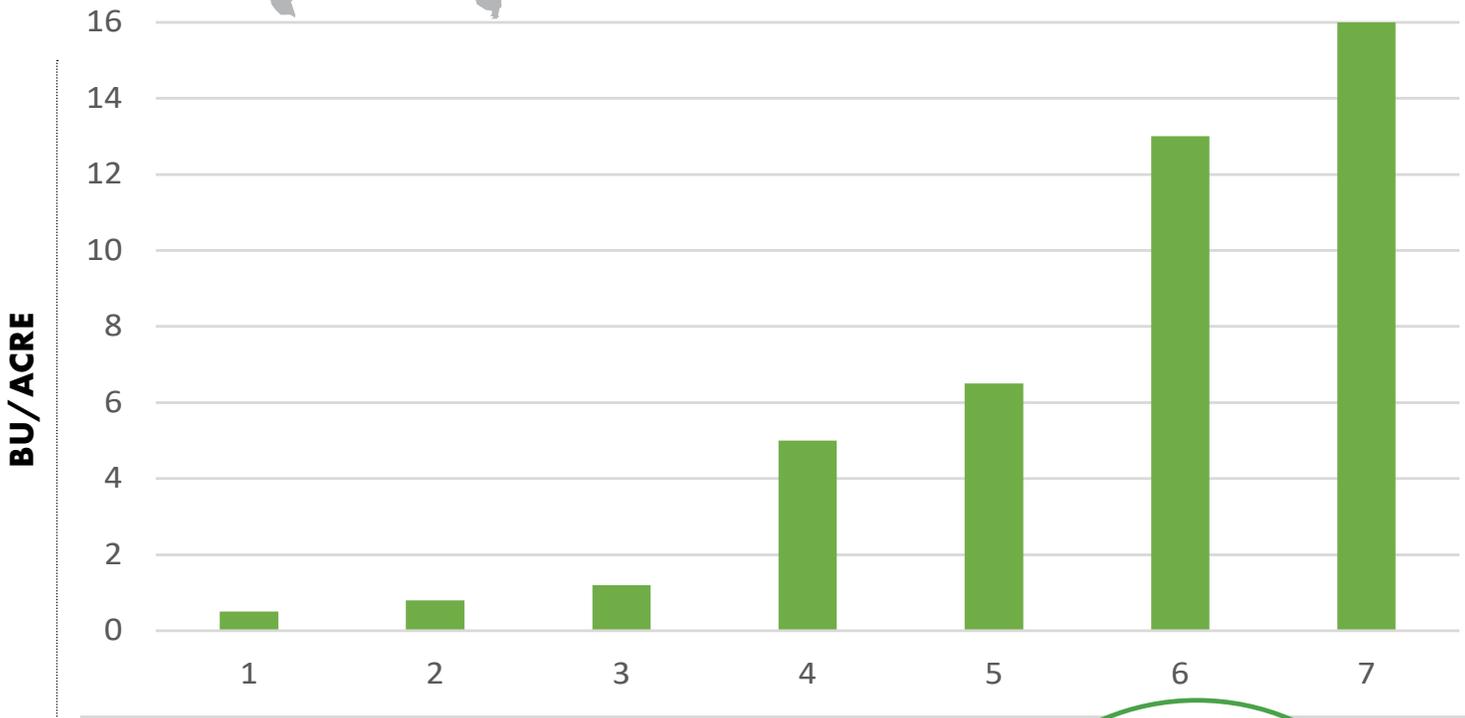
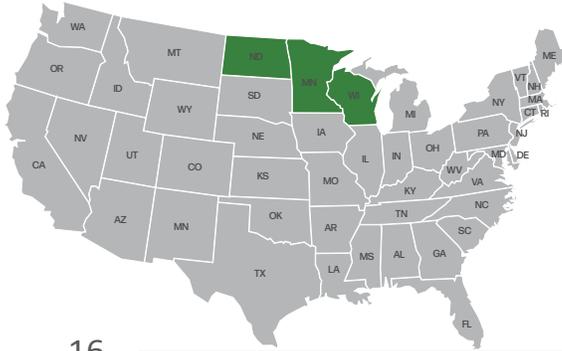
7
DATA POINTS

100%
POSITIVE RESPONSE

3
STATES

6.1 BU/ACRE
AVERAGE INCREASE

7
LOCATIONS



COMMENTS

Right from the beginning we saw the advantages of using Terrasym 401 + Dust. The enhanced nodulation was impressive while the overall plant health throughout the course of the season appeared superior to the control plots.

6.1

BU/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

BALDWIN, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 11, 2022
HARVESTED



-vs-

CONTROL

13.4%
TREATED MOISTURE

-vs-

12.5%
TREATED MOISTURE

54.4
TREATED BU/ACRE

-vs-

53.6
CONTROL BU/ACRE

BU/ACRE



0.8
BU/ACRE

ADVANTAGE



Terrasym 401 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FAIRFAX, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 11, 2022
HARVESTED



-vs-

CONTROL

10.1%
TREATED MOISTURE

-vs-

10.4%
TREATED MOISTURE

59.7
TREATED BU/ACRE

-vs-

53.2
CONTROL BU/ACRE

BU/ACRE



Terrasym 401 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

FREMONT, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 26, 2022
PLANTED

OCT. 20, 2022
HARVESTED



-VS-

CONTROL

13.3%

TREATED MOISTURE

-VS-

13.7%

TREATED MOISTURE

61.5

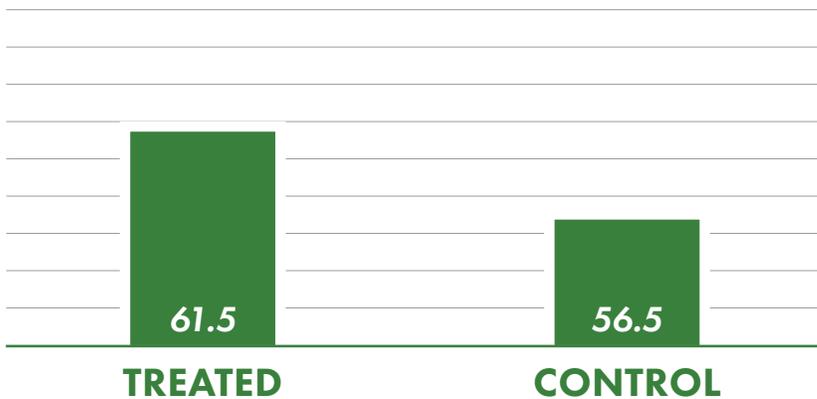
TREATED BU/ACRE

-VS-

56.5

CONTROL BU/ACRE

BU/ACRE



Terrasym 401 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HAGER CITY, WI
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 9, 2022
PLANTED

OCT. 18, 2022
HARVESTED



-VS-

CONTROL

11.3%
TREATED MOISTURE

-VS-

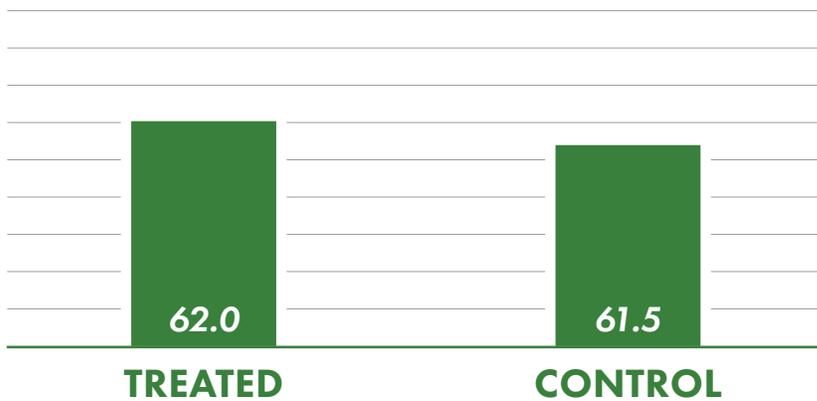
11.4%
TREATED MOISTURE

62.0
TREATED BU/ACRE

-VS-

61.5
CONTROL BU/ACRE

BU/ACRE



Terrasym 401 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

HARVEY, ND
LOCATION

SOYBEANS
CROP TYPE

03X329
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 14, 2022
HARVESTED



-vs-

CONTROL

10.3%
TREATED MOISTURE

-vs-

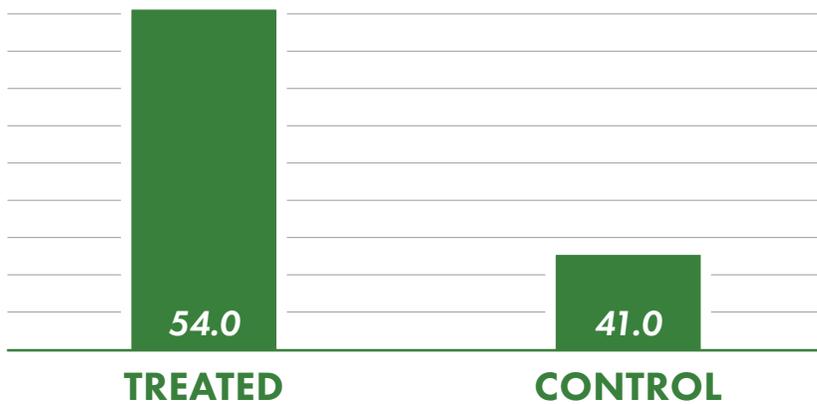
10.0%
TREATED MOISTURE

54.0
TREATED BU/ACRE

-vs-

41.0
CONTROL BU/ACRE

BU/ACRE



Terrasym 401 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

LUVERNE, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 23, 2022
PLANTED

OCT. 10, 2022
HARVESTED



-VS-

CONTROL

10.0%

TREATED MOISTURE

-VS-

9.7%

TREATED MOISTURE

85.9

TREATED BU/ACRE

-VS-

69.9

CONTROL BU/ACRE

BU/ACRE



16.0

BU/ACRE

ADVANTAGE



Terrasym 401 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

2022 YieldMaster Solutions

BIOLOGICAL FIELD TRIAL RESULTS

OSAKIS, MN
LOCATION

SOYBEANS
CROP TYPE

19E173N
SEED HYBRID/VARIETY

PLANTER BOX
APPLICATION METHOD

MAY 24, 2022
PLANTED

OCT. 7, 2022
HARVESTED



-VS-

CONTROL

17.8%

TREATED MOISTURE

-VS-

18.1%

TREATED MOISTURE

73.0

TREATED BU/ACRE

-VS-

71.8

CONTROL BU/ACRE

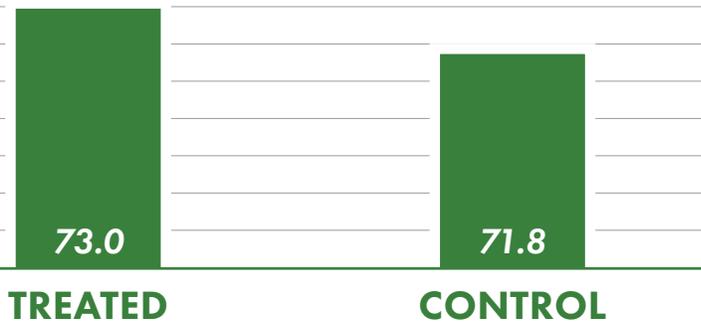
BU/ACRE



1.2

BU/ACRE

ADVANTAGE



Terrasym 401 + Dust is designed to deliver improved nutrient uptake leading to enhanced tolerance of abiotic stress, early season root development and higher yields. The added seed lubrication and seed flow properties allow for ease of use during planting.

ALFALEFA



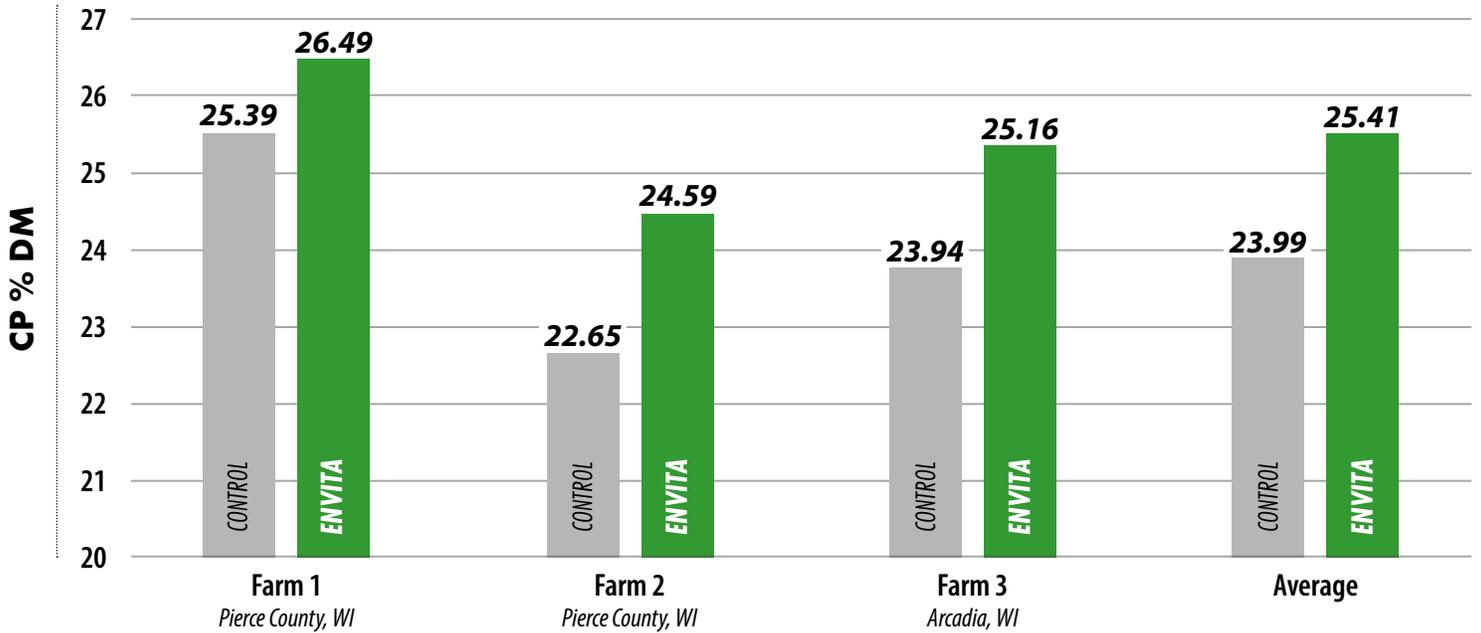


ALFALFA PROTEIN TRIAL DATA

2022 Data Results

Envita treated alfalfa averaged

1.42 points higher protein levels

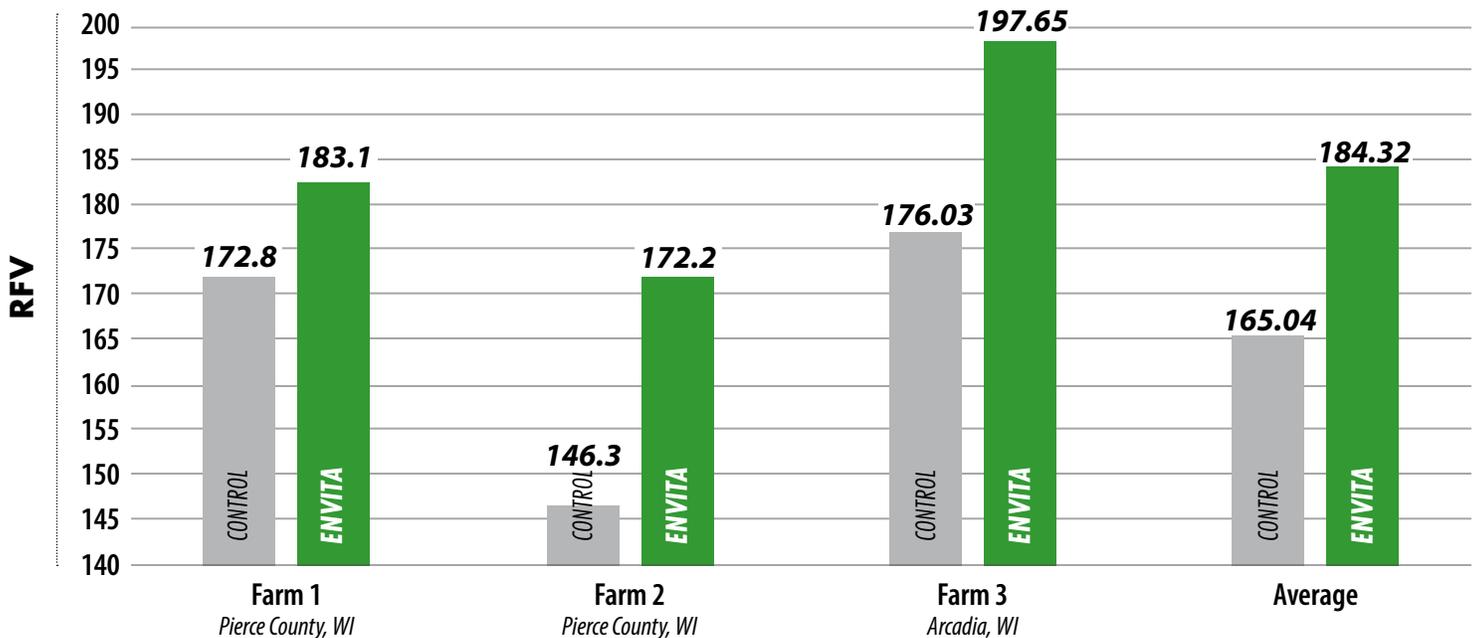


ALFALFA RFV TRIAL DATA

2022 Data Results

Envita treated alfalfa averaged

19.28 points higher RFV



POTATOES





POTATOES *(Russet Burbank)*

Multi-year Data Results

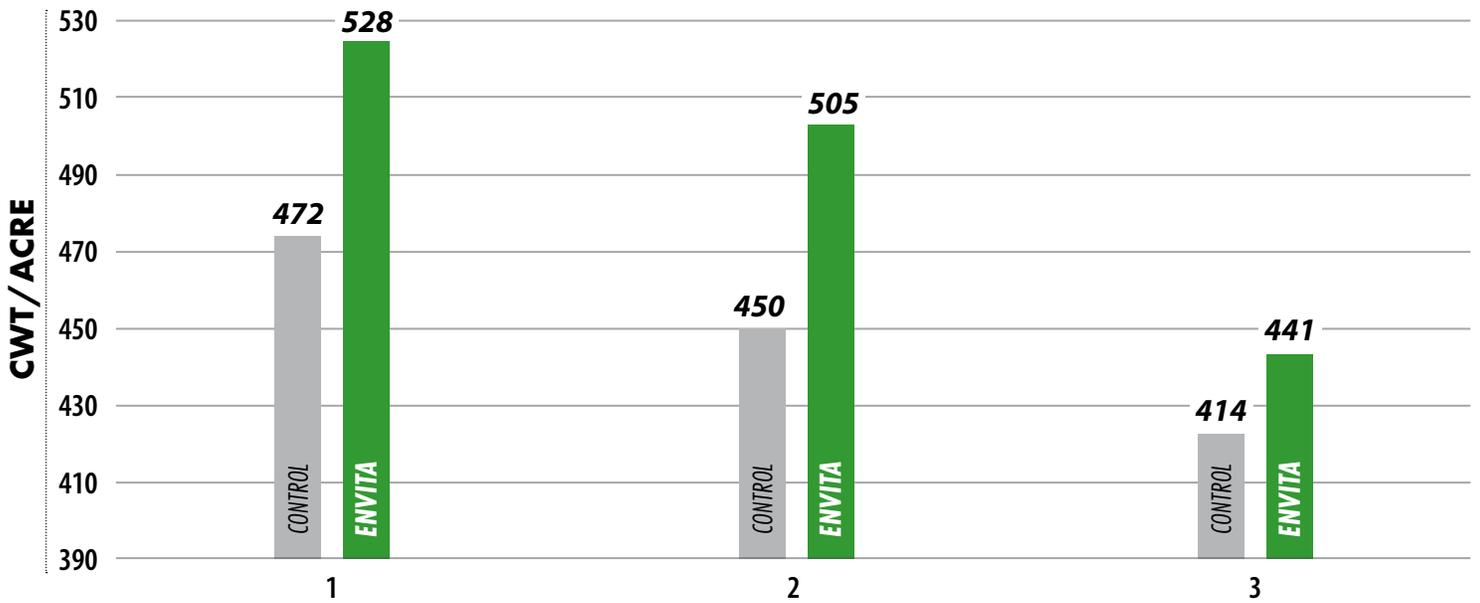
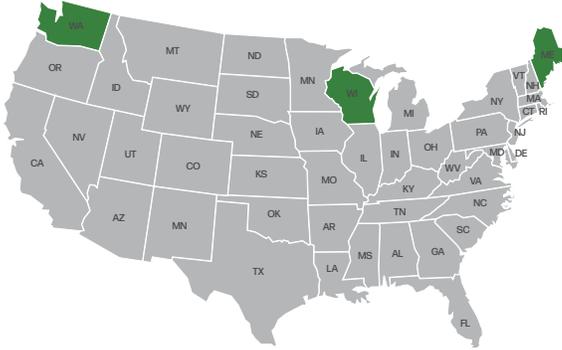
3
DATA POINTS

100%
POSITIVE RESPONSE

3
STATES

46 CWT/ACRE
AVERAGE INCREASE

3
LOCATIONS



COMMENTS

Envita has proven itself on potatoes across North America and Europe through a mix of replicated, processor and grower trials since 2020. The season-long, weatherproof nitrogen available from Envita has consistently brought excellent grower ROI through increased yields and improved processing quality, such as specific gravity.

46

CWT/ACRE

**AVERAGE INCREASE
WHEN POSITIVE**

SUGAR BEETS





SUGAR BEETS

Multi-Year Data Results

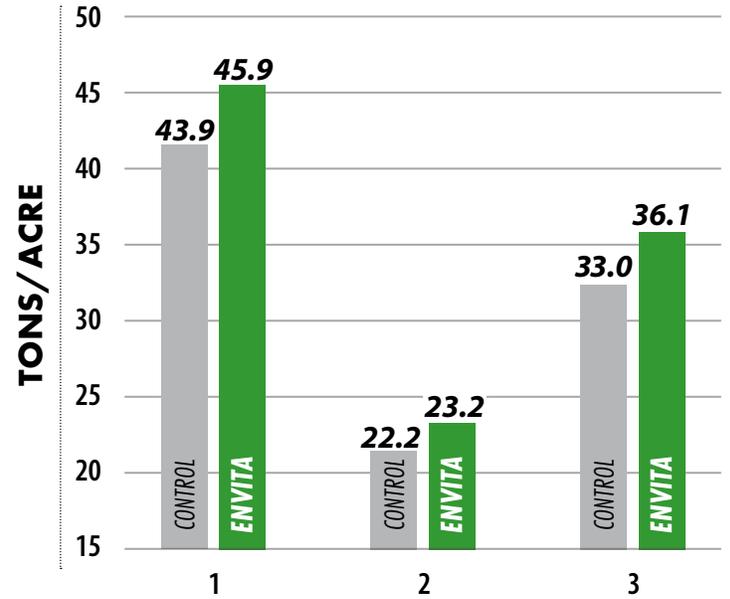
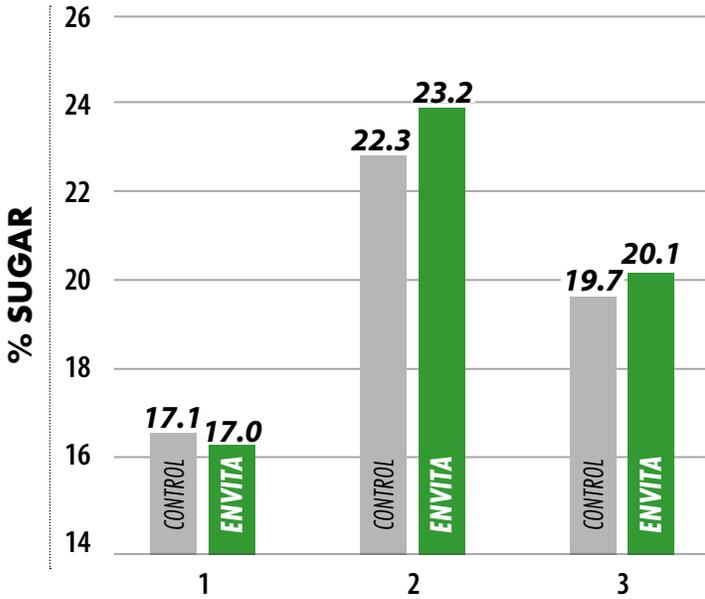
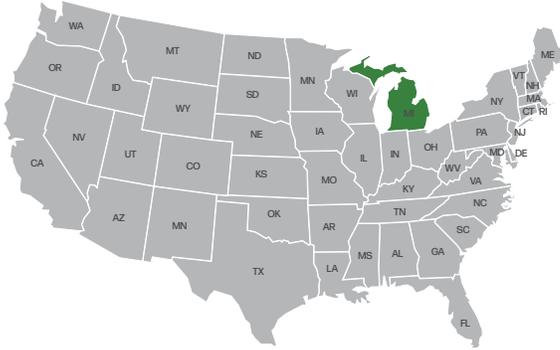
3
DATA POINTS

100%
POSITIVE RESPONSE

1
STATE

3.1 TONS/ACRE
AVERAGE INCREASE

2
LOCATIONS



COMMENTS

Envita has proven itself on sugar beets across the US, through replicated sugar processor trials since 2021. The season-long, weatherproof nitrogen available from Envita has consistently brought excellent grower ROI through increased tons per acre and increased sugar levels.

3.1
TONS/ACRE

AVERAGE INCREASE
WHEN POSITIVE

PHOTOS

From the field

en^oita

IONTM
fx



SoyTM
fx



LET'S CONNECT

Want to learn more about YMS product offerings?

Fill out our Contact Us form and a representative will reach out to answer any of your questions.



BIOLOGICAL INNOVATIONS



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